

EXPLORATION OF HISTORICAL SITES

By Y. D. SHARMA

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1. INTRODUCTION

THE invasion of northern India by Alexander the Great in 326 B.C. is an important landmark for the chronology of early Indian history, and it is hardly surprising if for a long time it was considered a convenient point to introduce the early period of Indian history. But the rôle of a political event is not the same in archaeology as in history. The archaeologist, therefore, must probe deeper, metaphorically and literally.

The Greek contact with India left certain notable bequests, the nature and extent of which were, however, exaggerated in the early days of Indological studies. It is now clear that the classical influence touched mainly the organized urban and monastic life and left the major cultural pattern of India comparatively unaffected. The commoner industries of ordinary folk might have experienced a ripple but continued to flow substantially in the existing channel.

Pottery among these industries invests a civilization with a cognizable identity and is an essential element of what Henri Frankfort terms the 'form' of a civilization.¹ It provides us, in our present context, with a much more satisfactory basis than a mere event for reviewing the historic archaeology of the Indian sub-continent.

What, however, is to be regarded as the beginning of the historical period in India? The question is as difficult to answer as it is easy to pose. It would be futile to look for a hard and fast line between the protohistoric and historic periods. Suffice it to say that the present survey begins approximately with the second half of the first millennium B.C., when the country had stepped into the Iron Age, and over large parts

¹ *The Birth of Civilization in the Near East* (London, 1951), p. 16.

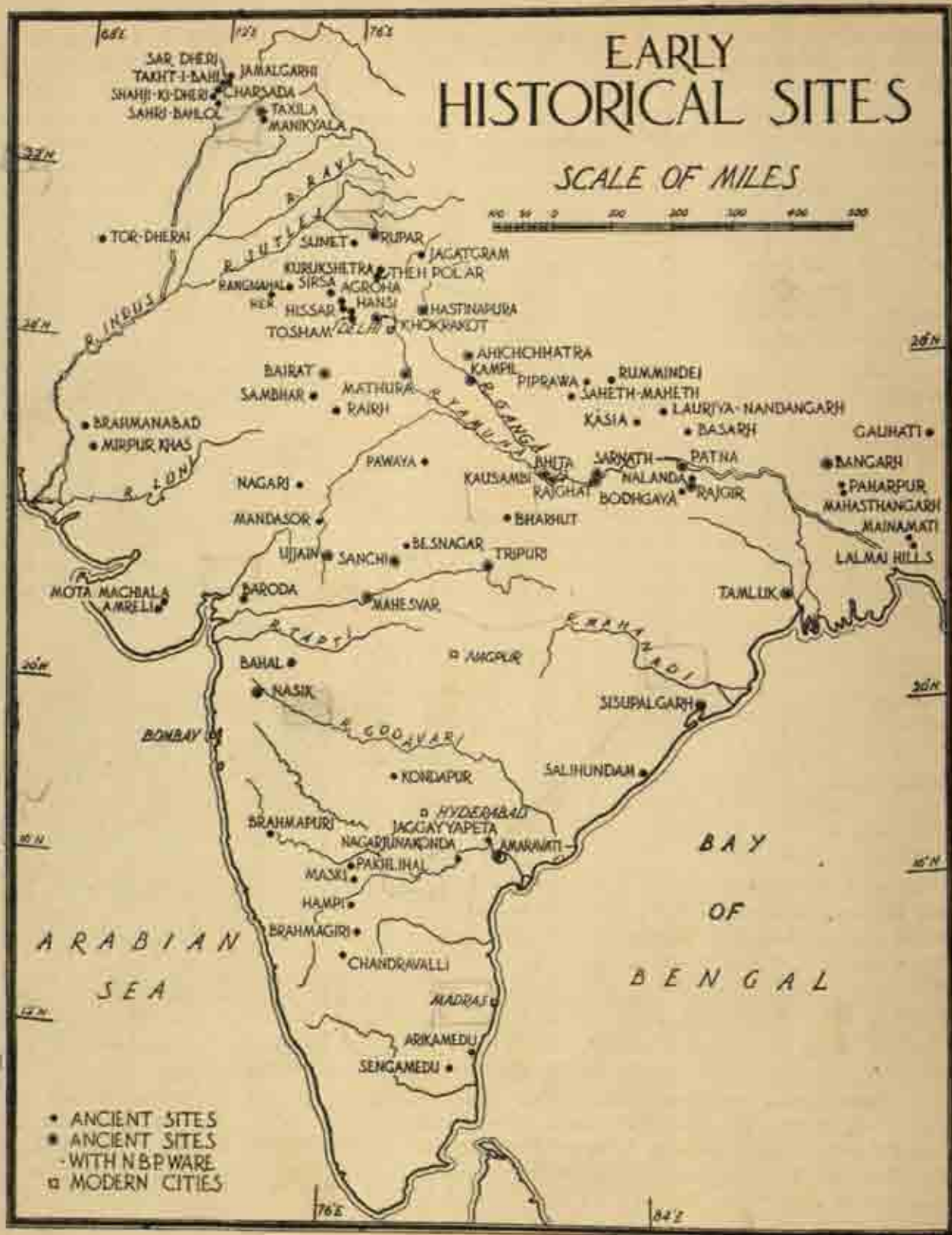


FIG. 1. (Include Amrāvati as an N.B.P. ware site)

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certain standard elements of civilization could be discerned. Writing in a script from which the present scripts derive had, or was about to, come in vogue. And this was also the time when an important event of known date took place—the coming of Buddha.

In upper India, a number of widely-distributed sites of this period are marked by the occurrence of a highly individualistic shiny ware, often black, and known to archaeologists as the Northern Black Polished (N.B.P.) Ware. Over a grey or rarely buff or reddish body, the colour of its surface varies from jet-black to metallic steel-blue and includes occasionally even shades of red, orange-gold, silver and other tints; but its lustrous surface is patently distinct from other diverse coatings of shiny slips. The evidence available till 1946, including the occurrence of the Ware at Taxila considerably lower than the two coin-hoards of *circa* 300 B.C., for the first time defined its duration between the fifth and third centuries B.C. and pointed to the Gangā plains as the centre of its dispersal.¹

Since then, mainly following extensive surface-explorations, its geographical distribution has become considerably enlarged. It is not intended to catalogue here the sites where it occurs, but a glance at the accompanying map (fig. 1) will show that from Taxila in the north it has been reported as far south as Amarāvati in Krishnā District;² eastward it has been obtained from Tamluk in Midnapur District,³ from Bāngarh in Dinājpur District,⁴ and from ancient Gaur in Māldā District;⁵ finally, on the west, it occurs at Nāsik,⁶ not much far from the coastal region. Recent explorations and the current excavation at Kauśāmbī, where it profusely occurs,⁷ confirm its origin in the central Gangā plains. Its earlier estimated duration may also have to be reviewed to include another century at either end. Broadly speaking, it would appear to be coeval with the supremacy of Magadha.

Away from northern India, wherever it has been so far observed in a systematic excavation, it is associated with the Mauryan or post-Mauryan levels. In this, one is inclined to visualize its dispersal with the Mauryan conquest, although it would admittedly be somewhat premature to stress this implication at this stage.

The popularity of the N.B.P. Ware was without doubt extensive; eastern Rājputānā, western, central and eastern India—all imported it in some quantity, probably through traders and pilgrims. Removed from its manufacturing centre, it was precious and evidently in short supply, as broken pots in this Ware, particularly in these parts, are sometimes found rivetted with copper pins to prolong their life.

Dish and bowl are the dominant types in the N.B.P. Ware, although other shapes are by no means rare (fig. 2). In the north and upper Gangā plains, the shapes of plain wares that occur with and follow the N.B.P. pottery have been classified to some extent (e.g., figs. 5, 6 and 7, below, pp. 127-129); the report on current excavation at Kauśāmbī will, it is hoped, include a similar catalogue which would be valid for the central Gangā region. But the ceramic varieties associated with the N.B.P. Ware in other parts are still to be systematized and published.

¹ *Ancient India*, no. 1 (1946), pp. 55 ff.

² Information from Shri A. Ghosh.

³ Information from Shri B. B. Lal.

⁴ Kunja Gobinda Goswami, *Excavations at Bangarh* (Calcutta, 1948), p. 27.

⁵ Information from Shri S. C. Chandra.

⁶ H. D. Sankalia, 'Ancient and prehistoric Maharashtra', *Jour. Bombay Branch Roy. Asiatic Soc.*, XXVII (1951), p. 103.

⁷ Information from Shri G. R. Sharma, through whose courtesy I have seen some of the material unearthed at Kauśāmbī.

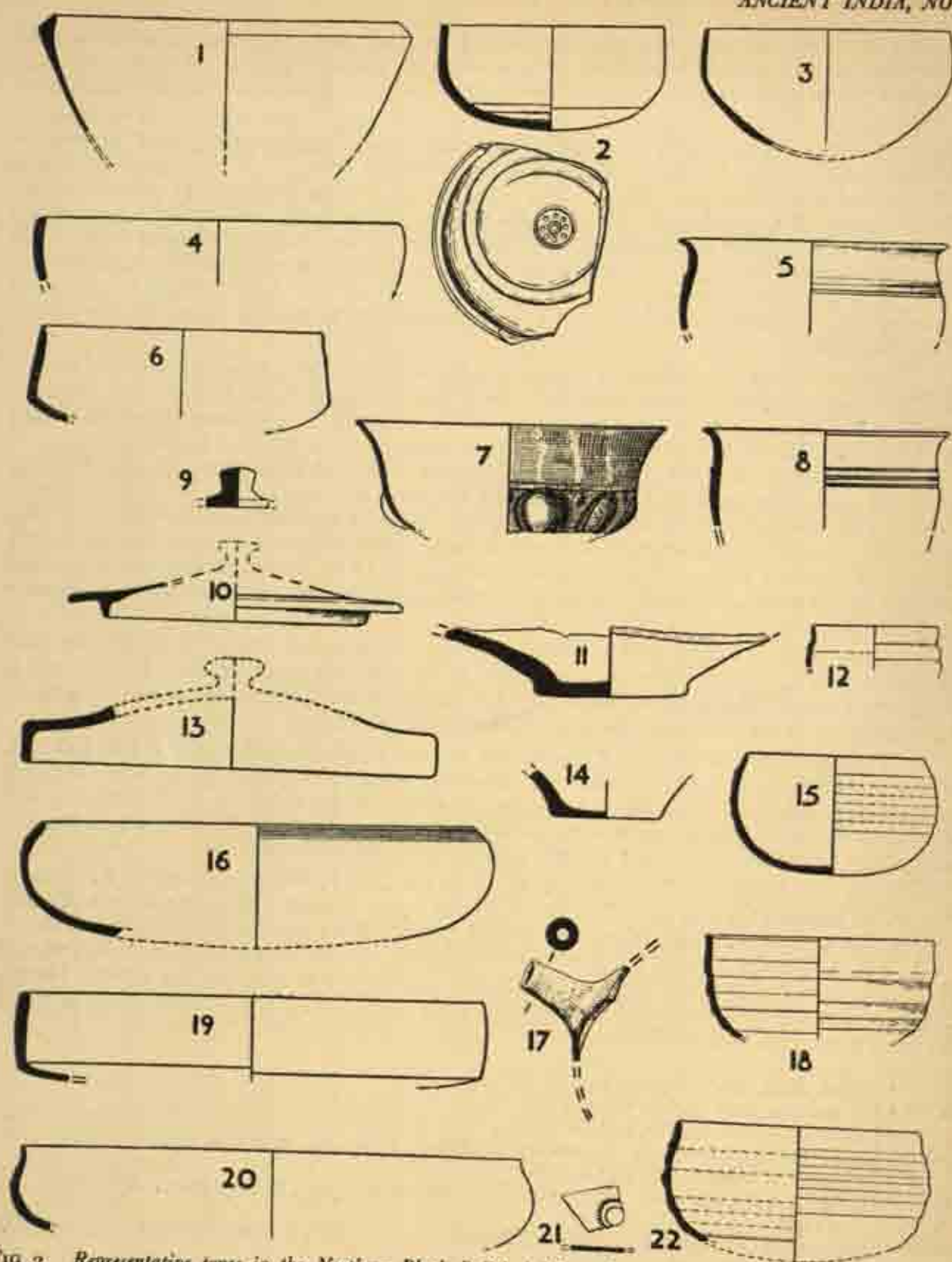


FIG. 2. Representative types in the Northern Black Polished Ware, from: 1, 3, 5, 8, 10, 17 and 19, Rupar; 2 and 18, Rājgir; 4, 9, 12, 14, 20 and 21, Tripurī; 6, Bahal; 7, Bhīr Mound; 11 and 13, Hastināpura; 15, 16 and 22, Ahichchhatrā. $\frac{1}{2}$

A beginning in placing the ceramic sequence of the peninsular south on a firm chronological footing has also been made in recent years (fig. 14, below, p. 164). For the identification at Arikamedu, near Pondicherry, of certain wares of Roman origin, imported or imitated, provided a firm datum-line for dating the local products.¹ Of these, the red-glazed 'Arretine' ware from Roman marts appears to have been regularly debarked on Coromandel coast from A.D. 20 to 50. The two-handled amphora and the wide dish, grey or greyish pink in colour, with 'rouletted' pattern on its inside, were other importations, the latter possibly indicating merely an imitation of a foreign technique of ornamentation. Both these ceramics arrived at Arikamedu a little earlier than the 'Arretine' ware and continued to arrive longer afterwards, their total duration lasting for the initial two centuries of the Christian era.

The rouletted ware has already been traced northwards with fruitful results. Its stratigraphic horizon at Brahmagiri and Chandravalli in Mysore State has helped to date the Black-and-red 'megalithic' Ware underlying it and the white- or yellow-painted russet-coloured pottery, the so-called 'Āndhra' Ware, which lies interlocked with it² (below, p. 166). Further north, at Śiśupālgarh in Orissa, it occurs with a sophisticated local pottery, mostly bright red³ (below, p. 169).

The task now is to close in on central India with the dated industries from the north and south. This line of attack has started bearing fruit, and a sequence in barest outlines is already emerging (fig. 13, below, p. 158). A black-and-red pottery, analogous in technique with the 'megalithic' pottery of the south, overlaps here in its upper levels with the N.B.P. Ware, which is followed by a red polished pottery, imported from Rome or imitating a Roman import. This black-and-red ware, of *circa* 700-100 B.C.,⁴ is found associated here with copper and not iron, unlike the southern 'megalithic' pottery of similar appearance. Whether its manufacture in the south could be regarded as an extension of the central tradition is yet to be seen.

The Roman contact with India is clear also from the numerous finds of Roman coins, dated from the first century B.C. to the fourth century A.D.⁵ Bronze vessels, statuettes and clay *bullae* imitating Roman coins are other evidences of Roman trade with southern and western India.

I have touched here briefly on the main ceramic sequence of early historical times. Coins, epigraphs, sculpture, architecture, seals, clay figurines and numerous other objects have not been noticed in this rapid summary; some of them are rare, and do not, in fact, present a chronological problem; others need a detailed independent treatment. Nevertheless, where necessary, reference will be made to these objects in the regional survey which follow. The details of recent excavations and explorations mentioned above have been supplied to me by several fellow-workers, and I have acknowledged their names in the footnotes. I am particularly grateful to Drs. H. D. Sankalia, S. P. Srivastava and Moreshwar G. Dikshit and Shri G. R. Sharma, Shri Vijayakanta Mishra, Shri M. N. Deshpande, Shri S. R. Rao and Shri N. R. Banerjee for supplying photographs and drawings

¹ R. E. M. Wheeler, A. Ghosh and Krishna Deva, 'Arikamedu: an Indo-Roman trading-station on the east coast of India', *Ancient India*, no. 2 (1946), pp. 17-124.

² R. E. M. Wheeler, 'Brahmagiri and Chandravalli 1947: megalithic and other cultures in the Chitaldrug District, Mysore State', *Ancient India*, no. 4 (1947-48), pp. 180-310.

³ B. B. Lal, 'Śiśupālgarh 1948: an early historical fort in eastern India', *Ancient India*, no. 5 (1949), pp. 62-105.

⁴ The date of this ware is tentative at this stage. Some excavators seem inclined to place it even earlier, almost at the beginning of the first millennium B.C.

⁵ *Ancient India*, no. 2, pp. 116 ff.

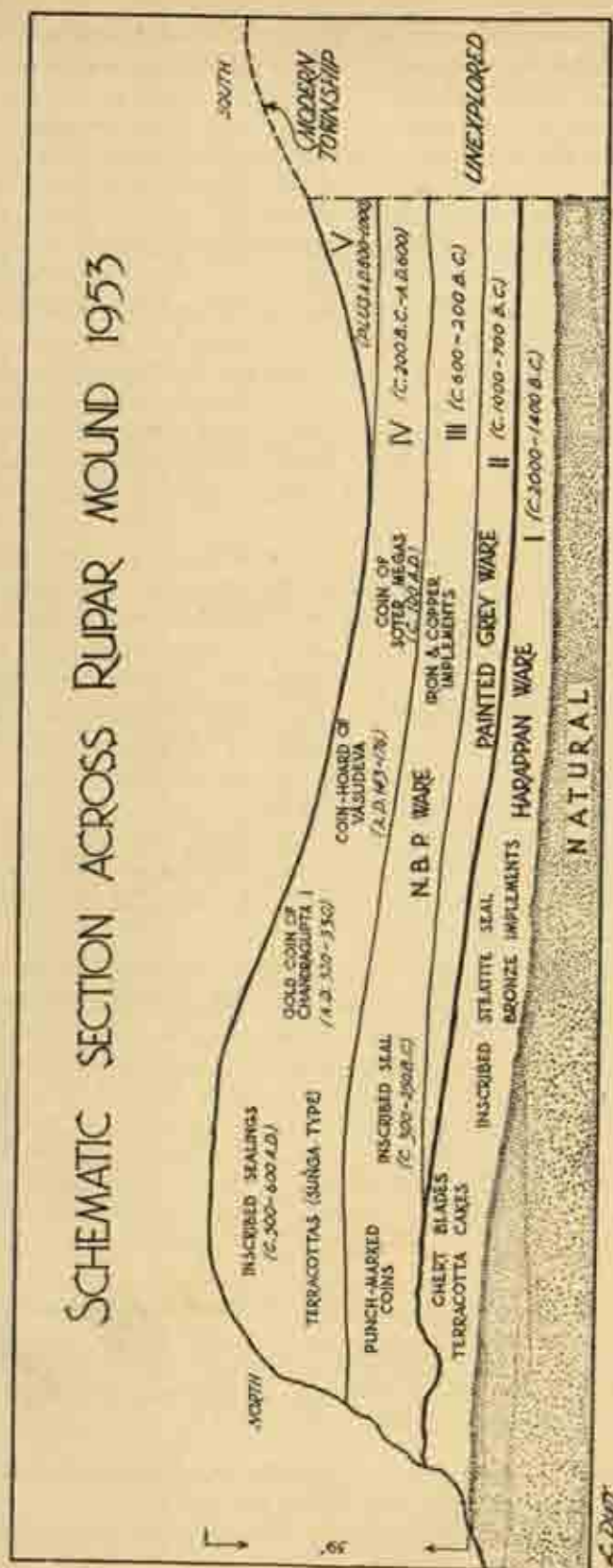


FIG. 3

as well. I also owe thanks to Shri K. K. Sinha for assistance in the selection and arrangement of the illustrations; to Shri S. P. Jain for the map of historical sites; to Shri Lakshmi Dutt, Shri R. P. Khare, Shri L. K. Jain, Shri Mohinder Singh Panesar and Shri H. N. Sajani for the preparation of the drawings; and to Shri S. G. Tewari and Shri R. Chatterjee for the photographs.

2. THE NORTH-WESTERN PLAINS

The north-west of the Indo-Pakistan sub-continent provides a convenient base-board to begin our survey of explored historical sites, for excepting the people who invaded India last—the Europeans—all other races and peoples crossed into the country from the north-west. The plains of the rivers of Panjab and the mountainous country to the north are two natural divisions of this country. The earliest civilizations flourished mainly in the former. For on the banks of the rivers of the Indus system and on the uplands of Baluchistan, the scattered village-communities of the Bronze Age were succeeded by the highly organized Harappans (above, p. 83). Later, these rivers were eloquently sung of and inhabited by the Vedic Aryans. Their settlements have not yet been identified with certainty, but if they are identical with the authors of the Painted Grey Ware, as they seem to be (above, p. 97), a chain of their settlements has already been located at least on the upper Sutlej. Unfortunately these rivers have not been systematically explored, except parts of the Indus, where investigations were directed mainly in search of Harappā and cognate or near-cognate cultures.¹

A. RUPAR

Recently, however, Rupar, 60 miles north of Ambālā on the Sutlej, has revealed an almost continuous succession of occupations from the Harappā to nearly the present times (figs. 3 and 4). The material collected from other sites in the neighbourhood indicates a similar sequence over a wider area, so that Rupar may serve as an index for the entire region.

The lower two settlements, those of the Harappans and of the authors of the Painted Grey Ware have been mentioned elsewhere (above, p. 96). The latter appear to have abandoned Rupar about 700 B.C. By 600 B.C., a new settlement had, however, sprung up there, and a coarse grey pottery, clearly devolved from the Painted Grey Ware tradition, with which it shares many characteristic shapes, was now in use. Associated with it is a homogeneous assemblage of the N.B.P. Ware and plain red ware. These earliest historical levels (Period III), dated to *circa* 600-200 B.C., also yielded punch-marked and uninscribed cast coins, some with Taxila symbols, copper and iron implements and an ivory seal inscribed in Mauryan Brāhmī characters (pl. XLVIII A). The fine workmanship and the well-known polish associated with the Mauryans is to be seen here on a small scale on a polished ring-stone minutely carved with figures and motifs associated with the cult of the Goddess of Fertility (pl. XLVIII B), recalling similar stones from Taxila,² Patna³ and elsewhere. *Kankar*-stone or river-pebbles set in mud-mortar were used for buildings in this period, although houses of mud and kiln-burnt bricks were by no means rare.

¹ N. G. Majumdar, *Explorations in Sind*, Mem. Arch. Surv. Ind., no. 48 (1934).

² John Marshall, *Taxila* (Cambridge, 1951), II, pp. 503 f.

³ S. A. Shere, 'Stone discs found at Murtaziganj', *Jour. Bihar Res. Soc.*, XXXVII (1951), pp. 1 ff.

FIG. 4

Sequence of cultural Periods at Rupar

Period I (circa 2000-1400 B.C.): 1-4, pottery types; 5-12, designs painted on pottery; 13 and 14, beads; 15, inscribed seal; 16 and 17, faience bangle and bead; 18, 20 and 21, bronze implements; 19, chert blade.

Period II (circa 1000-700 B.C.): 1-8, Painted Grey Ware; 9-11, beads; 12, bone stylus; 13, bone hair-pin(?).

Period III (circa 600-200 B.C.): 1 and 4-6, plain pottery-types; 2 and 3, types in Northern Black Polished Ware; 7, terracotta sealing; 8, carved ring-stone; 9, decorated stopper of ivory; 10, inscribed ivory seal and its impression; 11, ivory pendant; 12 and 13, silver punch-marked coins; 14, uninscribed copper cast coin; 15 and 16, iron implements; 17, copper dish; 18, bone stylus.

Period IV (circa 200 B.C.-A.D. 600): 1-3, pottery-types; 4 and 5, potsherds with impressed or incised designs; 6, terracotta lid (?); 7, terracotta votive tank; 8 and 9, terracotta human figurines; 10, coin of *Soter Megas*; 11, coin of *Vāsudeva*, Kushan king; 12, terracotta inscribed sealing; 13, silver utensil.

Period V (circa A.D. 800-1000): 1-3, pottery-types; 4, ivory bangle; 5, bone die; 6, ivory needle(?).

Period VI (circa A.D. 1300-1700): 1 and 2, plain pottery-types; 3, medieval glazed ware; 4, coin of *Mubārak Shāh*; 5, decorated head of a *surāhi* (water-vessel).

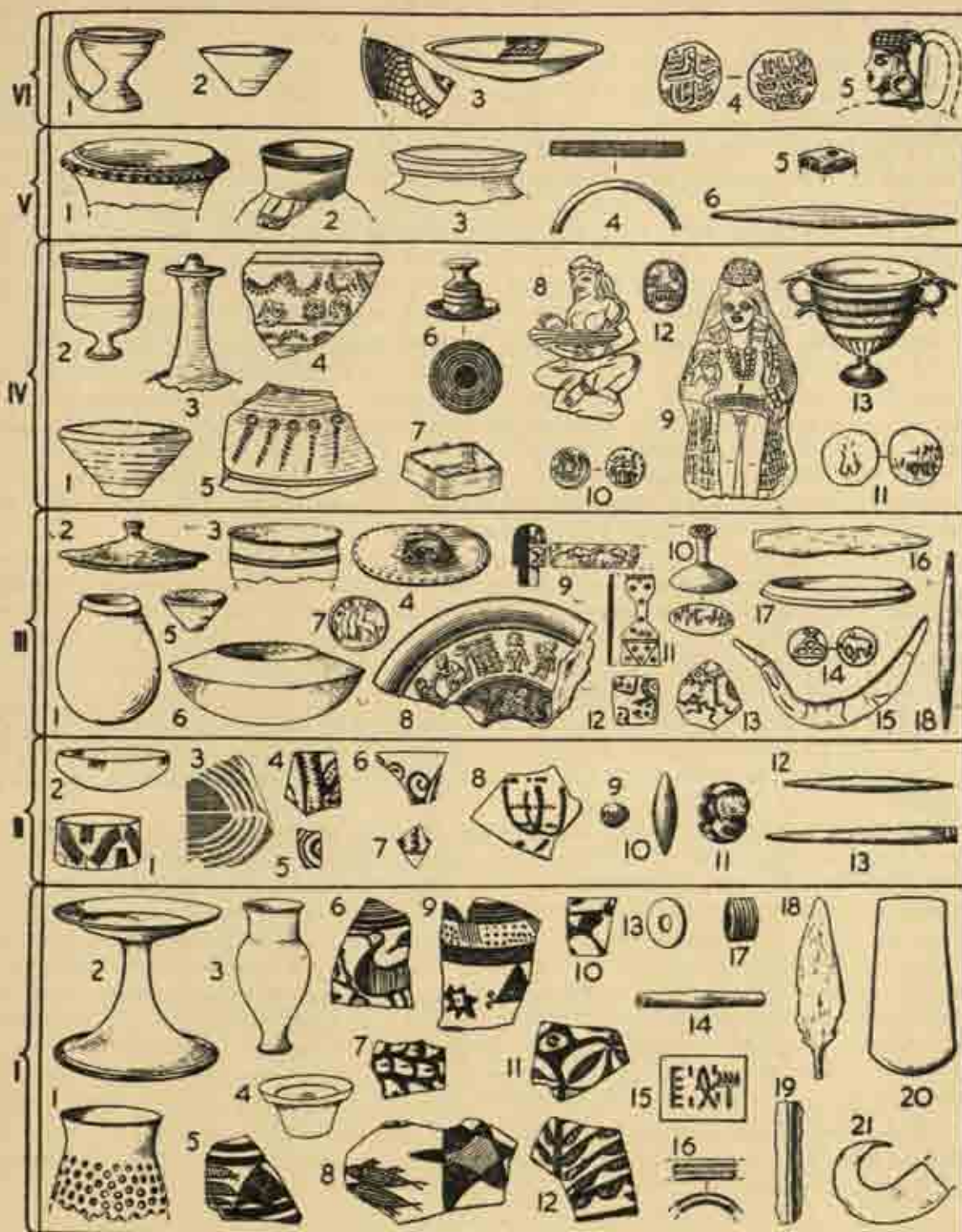


FIG. 4. Not to scale

A 12-ft. wide burnt-brick wall, traced to a length of about 250 ft., proceeds in a curve at the exposed ends and in all likelihood enclosed a tank, since an inlet through the wall was possibly used to feed the reservoir with rain-water (pl. XLIX A). The upper levels of this occupation are characterized by soak-wells lined with terracotta rings (pl. XLIX B).

The next occupation (Period IV) covers the rule of the Śuṅgas, Kushans, Guptas and their successors, from *circa* 200 B.C. to A.D. 600, and reveals several successive building levels (pl. XLVII). There is no dearth of datable objects in these levels. The Indo-Greeks now held sway over part of Panjab, and among their coins found at Rupar may be mentioned the issues of Antialcidas (second half of the second century B.C.), the 'nameless' Indo-Parthian king with the baffling title of *Soter Megas* (*circa* A.D. 100) and a clay mould prepared from a coin of Apollodotus II (first century B.C.). Among the tribal issues, some bear the Taxila symbol and include coins of the Audumbaras and Kuṇḍas (*circa* 100 B.C. to A.D. 100) and Mathurā rulers (*circa* 200-100 B.C.). In the upper levels occurs a large hoard of copper Kushan coins of Vāsudeva and a gold issue of Chandragupta-Kumāradevi type. There are terracotta figurines in Śuṅga and Kushan styles (pl. L A) and include a seated figure of a lady playing on lyre reminiscent of Samudragupta's figure in likewise position on his coins (pl. L B). A set of three silver utensils of ritual use is again representative of Gupta craftsmanship. A number of terracotta sealings in characters of the fifth-sixth centuries provide the upper date of the period. The pottery of these levels is for the most part red (fig. 6) and is frequently decorated with incised or impressed motifs, natural or religious (fig. 7).

After a break, there is evidence of a new occupation (Period V) commencing about the ninth century and lasting for two or three centuries. But by this time the occupation had become confined to the southern part of the site where the present town lies. The spacious brick buildings of this period were constructed neatly and suggest a good measure of prosperity. Again, possibly after a short desertion, a new town (of Period VI) sprang up here and continues to flourish to this day, although the sequence is closed with a terminal date of A.D. 1700 to separate the archaeological material from recent accumulations. Pre-Mughul glazed ware, *lakhauri* bricks and Muslim coins, found on surface and in top fillings, form the main evidence of this occupation, as no structures of this period were encountered in the excavation.

The ceramic types of Rupar bring home the fact that the river-valleys of Panjab and the Gangā system were culturally knitted together from early historical times. Some of these types from Rupar, in common use over the entire north during the third quarter of the first millennium B.C., are illustrated in fig. 5. Through a transitional phase a vast variety of sophisticated types emerges in the early centuries of the Christian era, the more typical of which are shown in fig. 6. Some of these bear the imprint of Greek contact, notably the footed goblet (fig. 6, 22-24). Another 'foreign' type appears to be the long-necked, narrow-mouthed 'sprinkler' (fig. 6, 10). A good proportion of this pottery bears impressed, notched or incised designs consisting of distinctive naturalistic or religious motifs (fig. 7). The taurine, *svastika*, *nandipada*, *abhaya-mudrā*, festoon, leaf, conventional lotus or rosette, spiral and natural or stylized 'conch-shell' motif form some of these designs.

The pottery of the medieval periods is avowedly utilitarian, with little pretensions to aesthetic form and ornamentation, except perhaps the painted glazed ware introduced by the Muslim invaders.

B. THE JANAPADAS

During the half millennium preceding the Christian era parts of India were divided into several city-states, small 'republics' called *janapadas* in Sanskrit. A number of these

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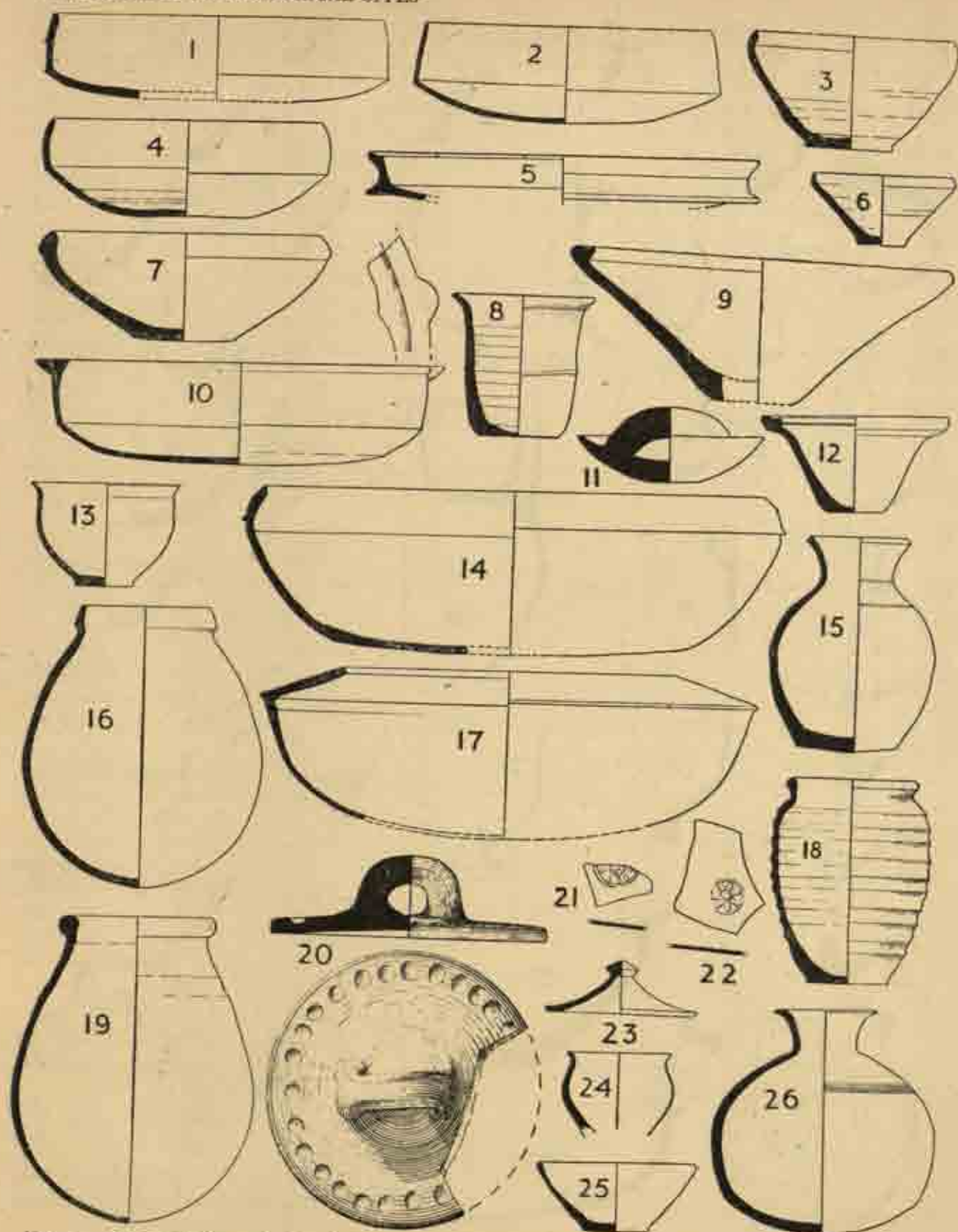


FIG. 5. Representative early historical pottery associated with the Northern Black Polished Ware from Rupar. $\frac{1}{4}$

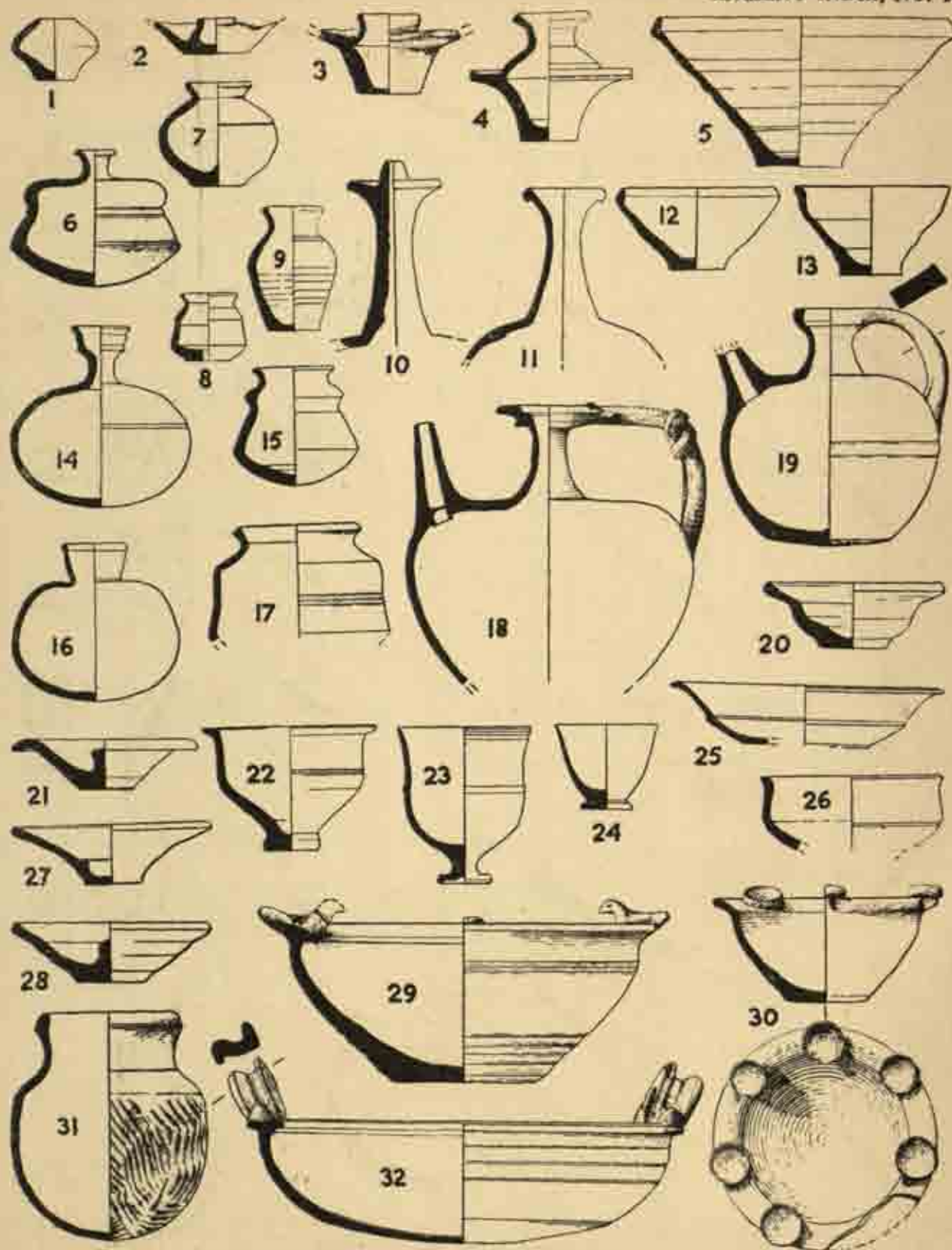


FIG. 6. Representative pottery of the early centuries of the Christian era from Ruar. $\frac{1}{4}$

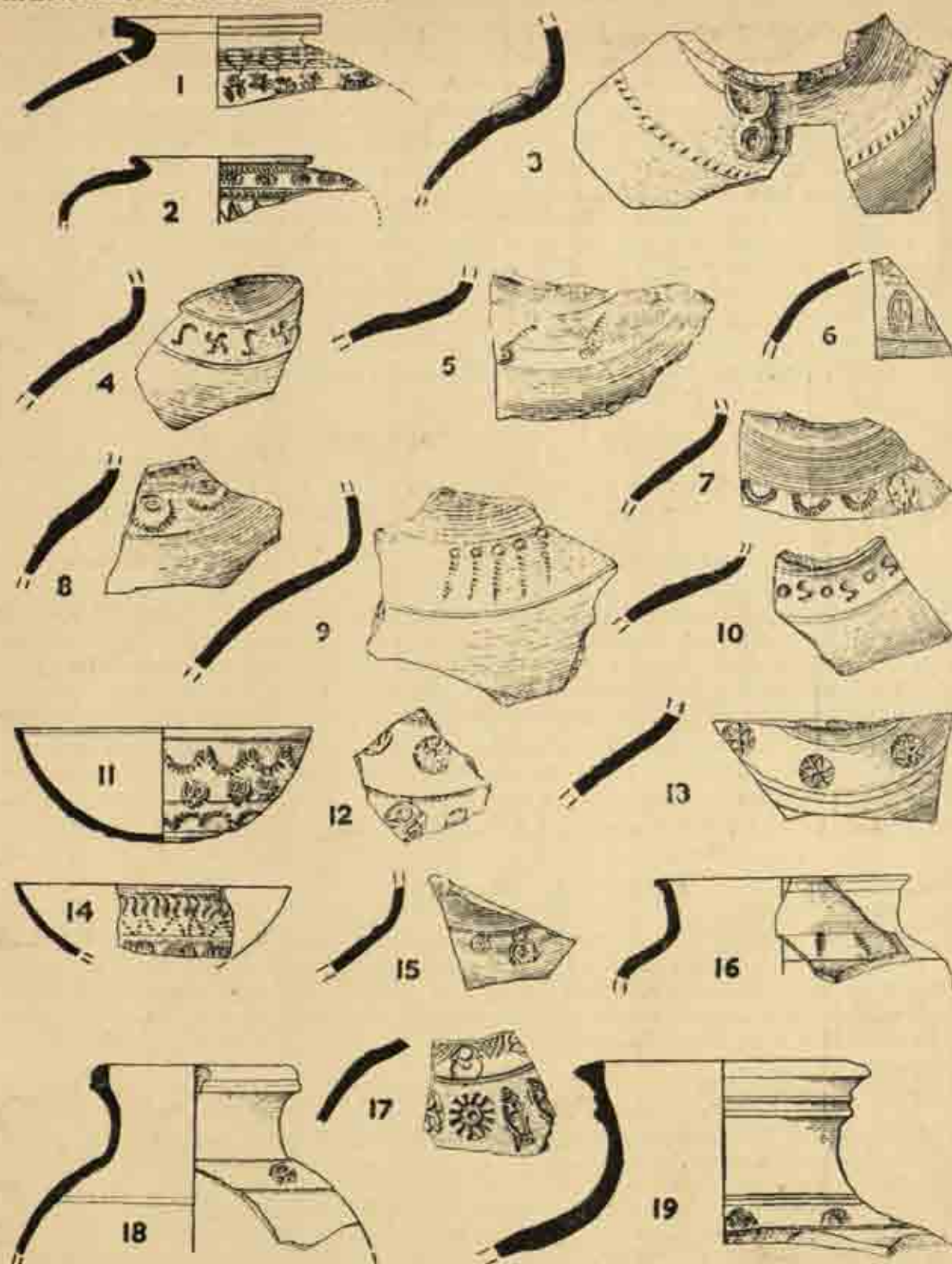


FIG. 7. Incised and impressed designs on north Indian pottery of the early centuries of the Christian era, from: 1 and 2, Hastināpura; 3-11, 13-16, 18 and 19, Rupar; 12 and 17, Ahichchhatra. $\frac{1}{2}$

are mentioned in the *Mahābhārata* and by the famous grammarian Pāṇini.¹ Archaeological corroboration of the existence of these *janapadas* comes from numerous finds of the so-called tribal coins. In the region under discussion Audumbara, Kulūṭa, Kuṇinda, Trigarta and Yaudheya are the important republics issuing coins.

Khokrā Kot, near Rohtak, represents a very large ancient town, possibly a capital of the Yaudheyas. In the *Mahābhārata* it is mentioned as Rohitaka. Clay moulds of coins discovered here have thrown important light on the process of casting coins in ancient India.² A later capital of the Yaudheyas is probably to be identified with Sunet, 4 miles west of Ludhiānā, where the early coins include Indo-Greek issues and those of Uttamādatta and Amoghahūti, rulers of Mathurā and Kuṇinda respectively.³ But it is the coin-moulds of the later Yaudheyas of the third-fourth centuries A.D. which are recovered here in large numbers. Of the same and subsequent dates are several clay sealings. The town continued to be in occupation till the tenth century A.D., as coins of Sāmantadeva, the Hindu king of Kabul, have also been found here.

C. KURUKSHETRA

The land enclosed by the Sarasvatī and Drishadvatī rivers, modern Sarsuti and Chautang, is called the holy land of Brahmāvarta in Sanskrit literature. Kurukshetra, the traditional scene of the *Mahābhārata* war, is part of this holy region. It is now represented by a series of mounds at Amīn, Thānesar, Pehowā (ancient Prithūdaka) and Rājā Karna kā Qilā, all on or in the vicinity of the Sarasvatī. Hiuen Tsang mentions several monasteries at Thānesar, which was an important capital at the time of his visit.⁴ The last of these mounds was superficially excavated in 1921-23 without encouraging results,⁵ except the discovery of a new inscribed coin of the second or third century A.D. and a terracotta sealing in Kharoshthī script. At Amīn two inscribed pillars dated to Kushan times were noticed.

Theh Polar, a mound on the Sarasvatī, was excavated in 1933-34⁶ and again in 1937-38. The site was found much disturbed owing to depredations by brick-robbers, but it yielded coins from the Indo-Greek to Mughul rulers. Subsequently, however, older relics in the form of pottery have been collected practically from all these mounds.

D. HARIĀNĀ

The tract between the Yamunā and the Rājputānā desert is locally called Hariānā and appears to have been thickly populated during the early centuries of the Christian era. Of the early towns here, Khokrā Kot, near Rohtak, has already been mentioned. Hānsi was another large town in ancient days. Twentyeight miles south of Hānsi on Toshām Hill have been discovered inscriptions of the fourth-fifth centuries of the Christian era.⁷

¹V. S. Agrawala, *India as known to Pāṇini* (Lucknow, 1953), pp. 48 ff.

²Birbal Sahni, *The Technique of Casting Coins in Ancient India* (Bombay, 1945), pp. 4 ff.

³*Proc. Asiatic Soc. Bengal*, 1884, pp. 137 ff.; A. Cunningham, *Arch. Surv. Ind. Rep.*, XIV (1882), pp. 65 ff.

⁴Thomas Watters, *On Yuan Chwang's Travels in India*, I (London, 1904), p. 314.

⁵*An. Rep. Arch. Surv. Ind.*, 1921-22 (1924), pp. 46 ff.; 1922-23 (1925), pp. 87 ff.

⁶*An. Rep. Arch. Surv. Ind.*, 1930-34 (1936), pt. i, pp. 142 ff.

⁷*Arch. Surv. Ind. Rep.*, V, (1875), pp. 136 ff.; XXIII (1887), pp. 19 ff.; J. F. Fleet, *Corpus Inscriptionum Indicarum*, III (Calcutta, 1888), pp. 169 ff.

Fourteen miles west of Hissār, itself an ancient town known as Aishukarī in olden days, a series of extensive mounds at Agrohā has yielded numerous coins suggesting that it was an important *janapada* known as Agrodaka.¹ Trial-excavations here revealed a prosperous town of well-planned houses. Sīrsā, ancient Śairīshaka, was also evidently a very important town, judging from the size of the high mound there.

E. TRIGARTA

The Doab between the Beas and Sutlej also yields evidence of occupation from late Harappā times, particularly along the river Bein. Jullundur, the ancient Jālandhara, is mentioned in the *Padma Purāṇa* as a holy region and is described at length by Hiuen Tsang.² The ancient town no doubt lies under the part known as Qilā Mohallā, and in the district there are several high mounds with early relics. Together with the hilly tracts of Kāngrā, etc., the Jullundur Doab is called Trigarta in Sanskrit literature, i.e., the land watered by the three rivers, Ravi, Beas and Sutlej. The hills of Kāngrā, Chambā and Hoshiārpur abound in remains of many early medieval towns and have yielded several inscriptions. A number of ancient temples also exist in these hills.

3. THE NORTH-WESTERN HIGHLANDS

In contrast with the lower hills, which appear to have remained isolated in early times, the tracts to the north-west were inhabited much earlier, though not as early as the plains below. The north-western highlands were the scene of the first Greek contacts, the surviving vestiges of which, predominantly coins, have enabled the excavators to compute a reasonable chronology for the indigenous objects lying above, below, or interlocked with them. The Gandhāra school of sculpture flourished here not merely as a style, but with important ramifications for the later Buddhist iconography, introducing the personal representation of Buddha.

A. TAXILA

The picture of the successive civilizations and of racial influx in this region is almost entirely derived from Taxila, ancient Takshāṣilā, 20 miles north-west of Rawalpindi in a valley of Murree Hills (fig. 8). It was extensively excavated between 1913 and 1934 and on a limited scale during 1944-45.³ Indian literature from the two epics down to the Buddhist Jātakas is familiar with this town, the latter referring to it as a great centre of learning, a university so to speak, although no such character is apparent in the buildings uncovered, unless the scattered Buddhist establishments formed the hub of an intensive scholastic life. It was the capital of eastern Gandhāra and lay on the meeting place of three great trade-routes—from western Asia, Kashmir and eastern India,

¹H. L. Srivastava, *Excavations at Agrohā*, Mem. Arch. Surv. Ind., no. 61 (1952).

²Watters, *op. cit.*, I, p. 296.

³John Marshall, *Taxila*, 3 vols. (Cambridge, 1951); *A Guide to Taxila* (Delhi, 1936); *Excavations at Taxila: The Stupas and Monasteries at Jauliān*, Mem. Arch. Surv. Ind., no. 7 (1921); A. Ghosh, 'Sirkap 1944-45', *Ancient India*, no. 4, pp. 41-84. The references to the *An. Reps. Arch. Surv. Ind.* have been omitted. For earlier exploration by Cunningham, see *Arch. Surv. Ind. Rep.*, II (1871), pp. 111 ff.

FIG. 8

Sequence of cultural Periods at Taxila (after Marshall)

Period I, Pre-Mauryan (circa 600-300 B.C.): 1 and 2, plain pottery-types; 3, Northern Black Polished Ware; 4, carved gem of agate; 5, ivory pendant; 6, bone bead; 7, bent-bar silver coin; 8, coin of Alexander.

Period II, Mauryan (circa 300-200 B.C.): 1-3, pottery-types; 4, carved ring-stone; 5-7, terracotta human figurines; 8, etched bead; 9, uninscribed copper cast coin.

Period III, Pre-Greek (?): 1-3, pottery-types; 4, terracotta human figurine; 5, coin of Diodotus II (?).

Period IV, Greek (circa 200-100 B.C.): 1-4, pottery-types; 5 and 6, terracotta human heads; 7, coin of Antialcidas.

Period V, Scytho-Parthian (circa 100 B.C.-A.D. 50): 1-8, plain pottery-types; 9 and 10, pottery with designs; 11, stone tray; 12, terracotta human figure; 13, terracotta votive tank; 14, ivory comb; 15, faience spacer; 16, ivory dice; 17, coin of Maues; 18, coin of Azes.

Period VI, Kushan (circa A.D. 50-200): 1, coin of Kujūla Kadphises; 2, coin of Huvishka.

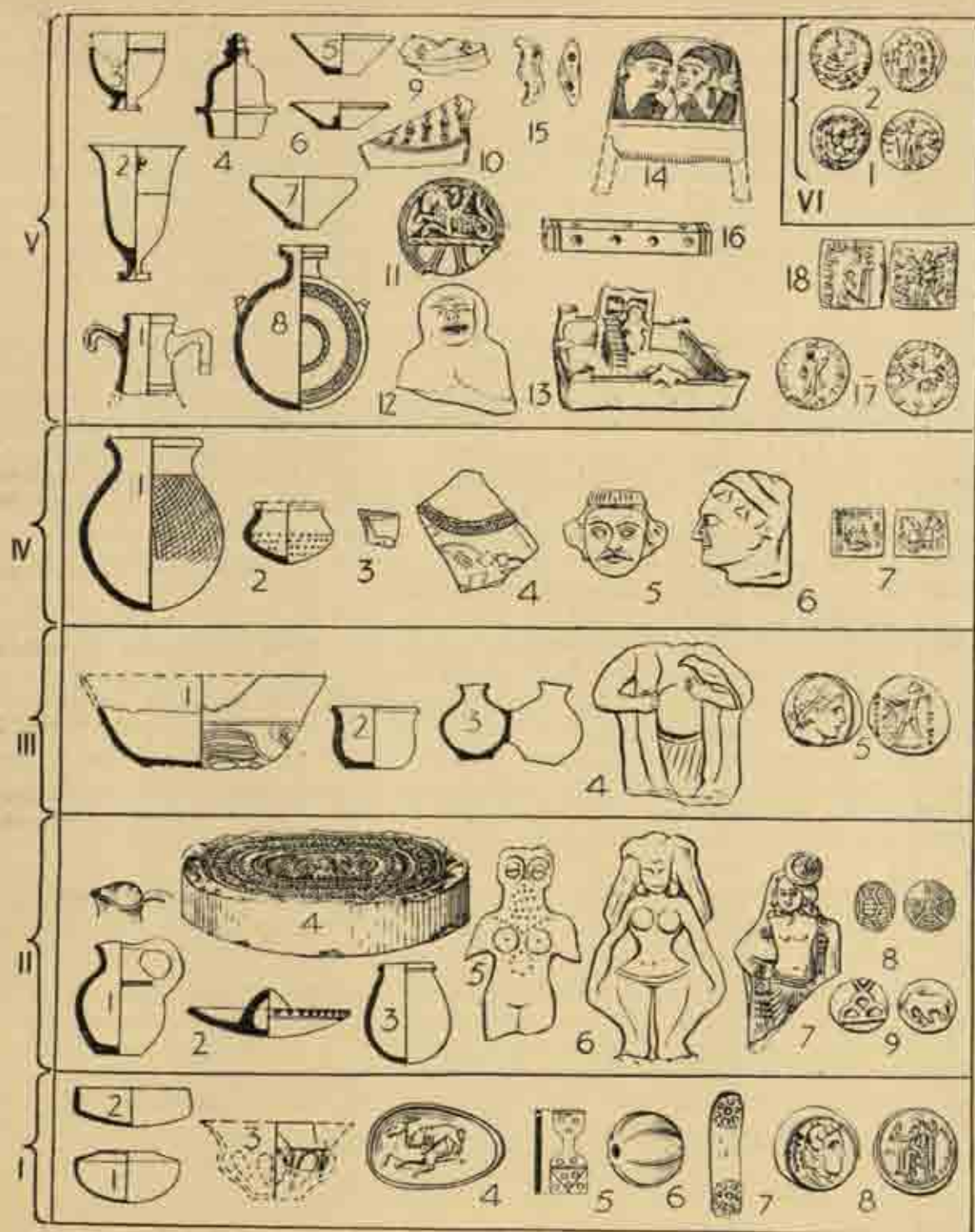


FIG. 8. Not to scale

In 326 B.C., Alexander the Great arrived here, and Āmbhi (Omphis), its king submitted to him. Later, it was conquered by Chandragupta Maurya and became a viceregal seat of the Mauryan empire; subsequently still, it came under the sway of Bactrian Greeks, Scythians, Parthians and Kushans, till the Hūnas laid it waste in the fifth century.

The ruins at Taxila consist of three successive city-sites, Bhīr Mound, Sirkap and Sirsukh. There are four successive settlements at Bhīr Mound, from the sixth to the second century B.C. It has no planned lay-out, and its structures, largely of rubble, show poor construction (pl. LI). In the excavation of 1944, an apsidal stone structure surrounded by a number of other buildings also came to light (pl. LII). Soak-wells, lined with terracotta rings as well as large jars placed one upon another, sometimes upside down, and provided with holes at bottom, attest to a serviceable arrangement for the discharge of sewage.

The second city, Sirkap, founded by the Bactrian Greeks in the second century B.C. and later built by the Scytho-Parthians 'on the typically Greek chess-board pattern, with streets cutting one another at right angles and regularly aligned blocks of buildings' (pl. LIII), provides a contrast in lay-out. The houses here are built neatly of coursed rubble-stone (pl. LIV), except in the Parthian levels, where diaper-masonry is introduced. To an earlier mud-rampart a stone defensive wall, $3\frac{1}{2}$ miles long, with rectangular bastions at irregular intervals, was added in the mid-first century B.C., probably by the Indo-Parthian ruler Azes I.² The total occupation of the town, with six or seven strata, lasted till the arrival of the Kushans, who laid a new city, Sirsukh, within a fortified rectangle. This city has, however, largely remained unexcavated.

The city of Sirkap included certain Buddhist monuments, notably an apsidal temple and some small *stūpas*, but the main religious establishments lay outside the bounds of the three cities. Of these, built on a high podium with a core of rough rubble, the Dharmarājikā Stūpa is circular on plan and hemispherical in elevation (pl. LV). From its central hub radiate sixteen thick walls, tied in by a casing, which is externally decorated with panels to accommodate stucco images of Buddha and other deities. The original *stūpa* inside the core was probably erected by Aśoka, one of whose titles was *dharmarāja* ('king of piety'), although the exposed features do not bespeak a date earlier than Kushan. A silver scroll recovered from its chapels is inscribed in the 136th year of king Azes.

On the Hathiāl spur occupying the southern portion of Sirkap are a *stūpa* and monastery, which, according to the tradition recorded by Hiuen Tsang,³ commemorate Kuṇāla, Aśoka's son, who suffered loss of his sight at the behest of his step-mother.

The most interesting among the religious establishments of Taxila, however, is the temple at Jāndiāl, situated not far from the northern gate of Sirkap. It is supposed to have ministered to the needs of the followers of Zoroastrian faith. Resembling a peripteral Greek temple, it has two ionic columns at the entrance with two more at the front porch (*pronaos*), which leads into the sanctuary (*naos*). At the far end is a back-porch (*opisthodomos*) and, in place of the usual peristyle of columns, a thick wall with windows at regular intervals.

¹ John Marshall, *Taxila*, I, p. 4.

² Marshall, *ibid.*, p. 117, would now ascribe the stone fortification to the Indo-Greeks. Contrast, however, *Ancient India*, no. 4, p. 45.

³ Watters, *op. cit.*, I, p. 246.

EXPLORATION OF HISTORICAL SITES

The datable material recovered at Taxila is indeed massive. The coins range from the punch-marked to the issues of medieval rulers of Kashmir, through local Taxilan, Greek, Indo-Scythian, Parthian, Kushan, Sassanian and Ohind issues. Cut gems of Greek workmanship, hoards of jewellery, seals and sealings, terracotta figurines and stone and stucco sculptures of Gandhāra school make it one of the richest archaeological sites.

The pottery from Bhīr Mound is for the most part plain and utilitarian, corresponding sufficiently, however, to the types known from the contemporary sites in the plains below and in the Gangā basin; among these are concave lid with loop-handle in centre, pear-shaped jar and carinated *hāndī* (similar to fig. 5, 11, 16, 19 and 17). Unfortunately the results of the 1944-45 excavation have remained unpublished, while the pottery unearthed earlier is far too inadequately illustrated. In spite, however, of the presence of the N.B.P. Ware, the coarse grey ware contemporary with it is apparently unrepresented at Bhīr Mound.

The specimens from Sirkap are marked by various utilitarian and ornamental devices like pinched lip, spout-handle and stable base, some of which have definite prototypes in Greek vessels. Typically Greek, however, are the two-handled glazed amphorae, standard beakers and goblets (fig. 8, V, 1-3) and small-handled censers.

B. CHARSADĀ

The only other excavated town-site in the north-west is Charsadā, on the Swāt river in Peshawar District, identified with Pushkalāvati, the capital of Gandhāra. Of the several mounds here, some were excavated in 1902-03 and a settlement of *stūpas* and other buildings exposed.¹ Important finds included stucco sculptures, beads and coins from the Indo-Greek to the Kushan rulers. The illustrated pottery-shapes do not go beyond the types familiar to us from Sirkap at Taxila, although three of the jars were inscribed in Kharoshthī characters of Kushan age. The lower levels were never reached, although they are likely to be much earlier in view of the unusual height of the mounds, one of which, Bālā Hisār, rises to 80 ft.

About 6 miles east of Charsadā, the high mound of Sar Dherī was excavated in 1938, although some terracottas from there had been published earlier.² The natural soil was not touched in the limited excavation. But the coins recovered here indicated the duration of the occupation from Indo-Greek to Kushan times.

C. OTHER SITES

Other sites excavated in this region have mainly revealed Gandhāra sculpture and the *stūpa*-architecture characteristic of Gandhāra. The ardour of the Kushans for Buddhism had inspired the construction of many Buddhist *stūpas* and monasteries in this country. The *stūpas* of Taxila and Charsadā have already been noticed; other *stūpas* deserving mention are at Manikyālā³ in Rawalpindi District; at Takht-i-Bāhī,⁴ Sahri

¹ *An. Rep. Arch. Surv. Ind.*, 1902-03 (1904), pp. 141 ff.; 1903-04 (1906), pp. 289 ff. For earlier exploration, see *Arch. Surv. Ind. Rep.*, II, pp. 89 f.; III (1873), pp. 96 ff.

² H. D. Gordon, 'Some terracottas from Sari Dheri, North-west Frontier Province, *Jour. Roy. Anthropol. Inst.*, 1932, pp. 163 ff.

³ *Arch. Surv. Ind. Rep.*, II, pp. 132 ff.; V, 75 ff.; XIV, pp. 1 ff.; *An. Rep. Arch. Surv. Ind.*, 1912-13 (1916), p. 17.

⁴ *Arch. Surv. Ind. Rep.*, V, pp. 23 ff.; *An. Rep. Arch. Surv. Ind.*, 1907-08 (1911), pp. 132 ff.; 1910-11 (1914), pp. 33 ff.

Bahlol¹ and Jamālgarhī,² near Mardan, and at Shāhji-kī-Dherī,³ near Peshawar. Unlike the hemispherical *stūpas* of Taxila and Manikyālā, these *stūpas* are raised on a square podium and consist of a drum receding in tiers, crowned by multiple umbrellas of diminishing sizes.

The gigantic *stūpa* at Shāhji-kī-Dherī, cruciform on plan, was built by Kanishka, the Kushan king, and is referred to by Hiuen Tsang and other Chinese pilgrims.⁴ Inside it was found an inscribed casket (pl. LVI) with a coin of Kanishka beside it. The casket enclosed a crystal reliquary with an orifice containing fragments of bone and closed by a clay sealing. The *stūpa* at Takhi-i-Bāhī is elaborately decorated with stucco figures and is famous for its colossal standing figures of Buddha. An establishment of monasteries and a *chaitya* was uncovered at Sahri Bahlol, and the coins recovered here ranged from those of Azes to later Indo-Scythians. Other evidence indicated the occupation of the site down to the times of Hindu Shāhīs of Kabul.

In the fifth-sixth centuries, some brick *stūpas* were also erected in the plains of Sind and in Baluchistan. The *stūpa* at Mīrpurkhās⁵ among these has three vaulted cells for the images of Buddha in the large square basement of baked bricks. Like other *stūpas* of the region, it is faced with ornamental bricks and plaques in Gupta style. The *stūpa* apparently remained in worship till the early Arab invasions (A.D. 715), as evidenced by inscribed tablets and coins. In the centre of the *stūpa*, 25 ft. below the surface, was found a stone coffer inside a chamber, and in a hole within the coffer were a number of beads, a small gold wire ring, copper coins, charcoal and grains of wheat. Tor-Dherai in Loralai District of north Baluchistan also contains the ruins of a *stūpa*, with moulded terracotta plaques and potsherds inscribed in Brāhmī and Kharoshthī of the second and third centuries A.D.⁶

The site of Brāhmanābād in Sind,⁷ where the Arab capital of Mansūrā arose over an earlier Hindu town, must also be mentioned. The earlier city is not properly dated, but judging from the presence of soak-wells and the use of large-sized bricks it may be regarded as sufficiently early. Hindu images and carved bricks found here reveal late Gupta style.

4. UPPER GANGĀ-YAMUNĀ DOAB

The early Aryan civilization flowered in the Gangā-Yamunā Doab. In the upper plains of these rivers the N.B.P. Ware is somewhat more abundant than in the north-west and Panjab but still appears to be an imported commodity. Following an ill-fired,

¹ *Arch. Surv. Ind. Rep.*, V, pp. 36 ff.; *An. Rep. Arch. Surv. Ind.*, 1906-07 (1909), pp. 102 ff.; 1909-10 (1914), pp. 46 ff.; 1911-12 (1915), pp. 95 ff.

² *Arch. Surv. Ind. Rep.*, V, pp. 46 ff.; *An. Rep. Arch. Surv. Ind.*, 1920-21 (1923), pp. 24 ff.; 1921-22, pp. 54 ff.

³ *An. Rep. Arch. Surv. Ind.*, 1908-09 (1912), pp. 38 ff.; 1909-10, pp. 135 ff.; 1910-11, pp. 25 ff.

⁴ Watters, *op. cit.*, I, p. 203; J. Legge, *A Record of Buddhist Kingdoms* (Oxford, 1886), p. 34.

⁵ *An. Rep. Arch. Surv. Ind.*, 1909-10, pp. 80 ff.

⁶ Aurel Stein, *An Archaeological tour in Waziristan and Northern Baluchistan*, *Mem. Arch. Surv. Ind.*, no. 37 (1929), pp. 64 ff. and 93 ff.

⁷ *An. Rep. Arch. Surv. Ind.*, 1903-04, pp. 132 ff.; 1908-09, pp. 79 ff. For previous exploration, see M. R. Haig, 'On the sites of Brahmanabad and Mansurah in Sindh; with notices of others of less note in their vicinity', *Jour. Asiatic Soc.*, XVI N. S. (1884), pp. 281 ff.

ochre-coloured plain ceramic, possibly associated with a copper-using culture,¹ and the Painted Grey Ware,² the historical remains on the upper Gangā are distinguished by the presence of a thick and slightly dark grey ware indicative of a derivation from the Painted Grey Ware. The N.B.P. Ware and a unitary assemblage of distinctive red ware types occur with it. With this assortment go punch-marked coins and iron and copper implements. The devolved grey and red wares include types common with those noticed to the west at Rūpār. This cultural continuum from *circa* 600 to 200 B.C. is coeval with the Mauryan rule in its upper levels. Narrow soak-wells (cf. pl. XLIX B), lined with kiln-burnt clay rings, are another feature of this culture.

The characteristics of Śuṅga, Kushan and Gupta periods are adequately reflected in their seals, sealings and coins. Likewise can their pottery, terracotta figurines, moulded plaques, sculptures and other artistic products be distinguished one from another. In the main there is a striking community of tradition between the combined ceramics of north-western plains and highlands on one hand and those of upper Gangā-Yamunā plains on the other.

A. AHICCHHATRĀ

Ahichchhatrā, the capital of the north Pāñchāla according to the *Mahābhārata*,³ about half a mile north-east of the village of Rāmnaḡar in Bareilly District, served as the type-site for this region for a long time. Parts of it were excavated by Cunningham, including a mound 2 miles west of it which is supposed to conceal a *stūpa* built by Aśoka.⁴ The more extensive and important work was, however, carried out here by the Archaeological Survey during 1940-44.⁵

The thick accumulations of Ahichchhatrā revealed nine 'strata' ranging from a date prior to 300 B.C. to *circa* A.D. 1100 (fig. 9). Although the presence of the Painted Grey Ware was noticed in the lowest levels at one of the excavated sites, the area excavated down to these depths was so small and disturbed that the priority of the Painted Grey to the N.B.P. Ware could not be asserted, though it appeared probable.⁶

In Period I, of the main excavated site, dated prior to 300 B.C., no structures were met with, but Period II, *circa* 300-200 B.C., revealed some mud-brick buildings and the presence of the N.B.P. Ware. Mud-brick houses continued in Period III, from *circa* 200 to 100 B.C. The first structures of kiln-burnt bricks were noticed in the succeeding levels, Period IV, of the first century B.C., when the city was also fortified by a 3½ mile long peripheral brick defensive wall over two earlier earthen ramparts. Pāñchāla coins were numerous in this Period and continued in Period V to the end of the first century A.D.

¹ B. B. Lal, 'Further Copper Hoards from the Gangetic basin and a review of the problem', *Ancient India*, no. 7 (1951), pp. 20 ff.; above, p. 93.

² B. B. Lal, 'The Painted Grey Ware of the upper Gangetic basin', *Jour. Roy. Asiatic Soc. Bengal* (Letters), XVIII.S. (1950), pp. 89 ff.; 'New light on the "Dark Age" of Indian history: recent excavations at the Hastināpura site, near Delhi', *Illustrated London News*, Oct. 4, 1952; above, pp. 93 ff.

³ B. C. Law, *Pāñchālas and their Capital Ahichchhatrā*, Mem. Arch. Surv. Ind., no. 67 (1942).

⁴ Arch. Surv. Ind. Rep., I, (1871) pp. 255 ff. For partial excavation by A. Führer, see his *Progress Report of the Epigraphical and Architectural Branches of the N.-W. Provinces and Oudh*, 1891-92, pp. 1 ff.

⁵ A. Ghosh and K. C. Panigrahi, 'Pottery of Ahichchhatra (U.P.)', *Ancient India*, no. 1, pp. 37 ff.; V. S. Agrawala, 'The terracottas of Ahichchhatrā', *ibid.*, no. 4, pp. 104 ff.; Moreswar G. Dikshit, 'Beads from Ahichchhatrā, U.P.', *ibid.*, no. 8 (1952), pp. 33 ff.

⁶ *Ancient India*, no. 1, pp. 58 ff.

FIG. 9

Sequence of cultural Periods at Ahichchhatrā

Period I (Stratum IX, earlier than the Northern Black Polished Ware): 1-4, Painted Grey Ware; 5, glass bead.

Period II (Stratum VIII, circa 300-200 B.C.): 1-6, and 9, plain pottery-types; 7 and 8, types in Northern Black Polished Ware; 10, stamped design on potsherd; 11 and 13, terracotta human figures; 12, etched bead; 14, uninscribed copper cast coin.

Period III (Stratum VII, circa 200-100 B.C.): 1-3, plain pottery-types; 4, stamped design on potsherd; 5 and 6, terracotta human figures.

Periods IV and V (Strata VI and V, circa 100 B.C.-A.D. 100): 1-3, pottery-types; 4, terracotta votive tank; 5, coin of Phalgunimitra; 6, coin of Bhūmimitra.

Period VI (Stratum IV, circa A.D. 100-350): 1-5, plain pottery-types; 6 and 7, potsherds with impressed designs; 8, terracotta human figure; 9, coin of Vāsudeva.

Period VII (Stratum III, circa A.D. 350-750): 1-3, pottery-types; 4, terracotta sealing bearing the inscription *śrī-Ahichchhatrā [bhuktan:]*; 5, falence spacer; 6 and 7, terracotta human heads; 8, coin of Achyu.

Period VIII (Stratum II, circa A.D. 750-850): 1-5, plain pottery-types; 6 and 7, pottery with impressed designs.

Period IX (Stratum I, circa A.D. 850-1100): 1-4, plain pottery-types; 5 and 6, potsherds with impressed designs; 7, terracotta plaque; 8, coin of Adivarāha; 9, *gadhayā* coin.

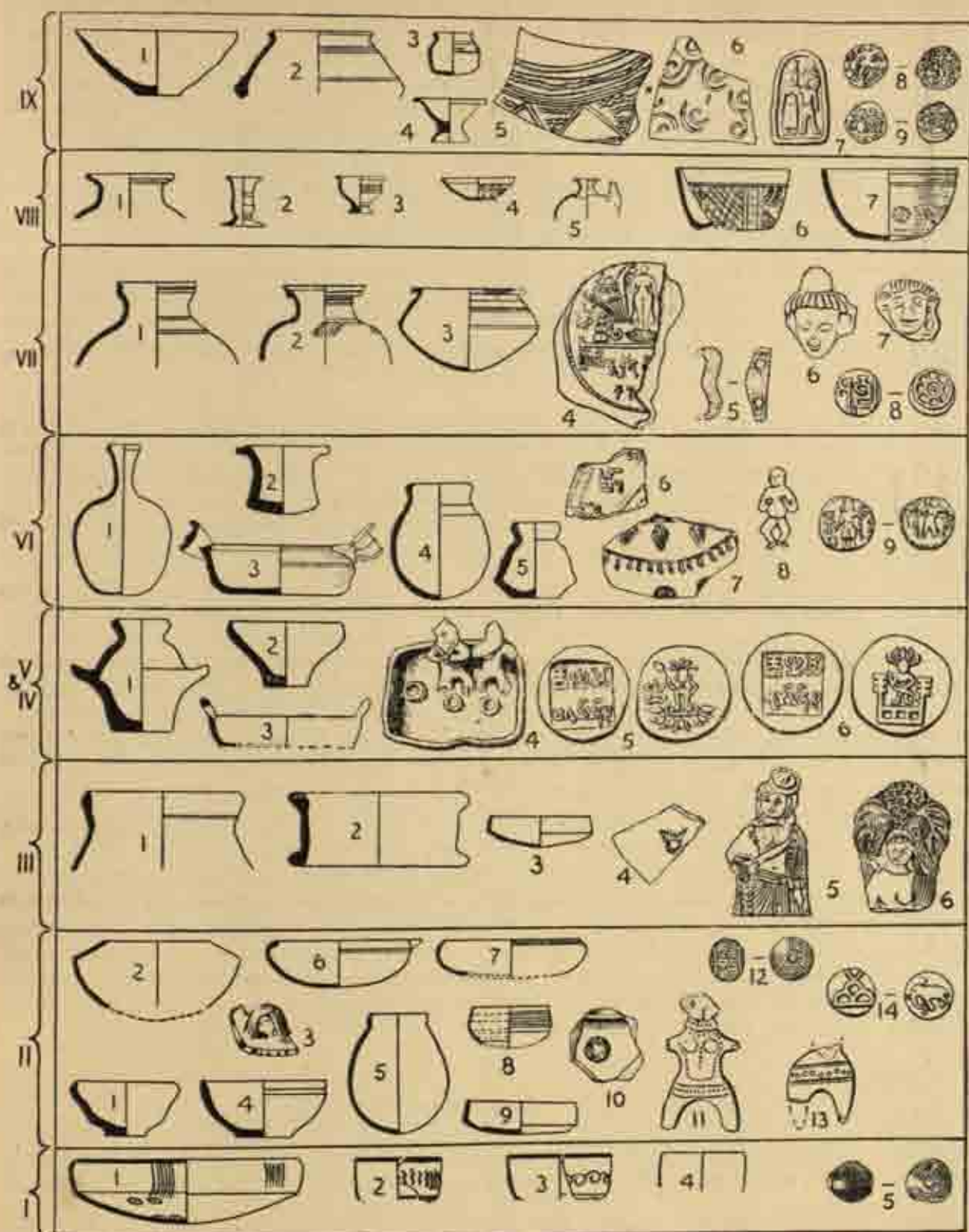


FIG. 9. Not to scale

Kushan coins were found in Period VI, *circa* A.D. 100-350. In the next Period, VII, *circa* A.D. 350-750, was encountered a temple-complex (pl. LVIII) with large-sized Brahmanical images of baked clay, the lower levels of the Period also yielding coins of Achyuta, identified with Achyuta, defeated by Samudragupta in *circa* A.D. 350. Periods VIII and IX, dated to *circa* A.D. 750-850 and A.D. 850-1100 respectively, showed poor buildings, and in the upper levels of the latter period were found coins of Ādivarāha and Vighraha. Elsewhere in the fortified area were identified two large terraced temples (one illustrated, pl. LVII), having their origin in Gupta times and continuing in use till the end of the city in the twelfth century, when, according to inscriptional evidence from elsewhere,¹ the capital of Pāñchāla moved to Vodāmayūtā (modern Badaun).

The excavations at Ahichchhatrā laid bare successive occupations of a long duration extending over a millennium and half. The chief value of the work lies in the fact that for the first time a beginning was made for the classification of historical pottery, the early types of which correspond largely to the illustrations in figs. 2, 5, 6 and 7.

B. HASTINĀPURA

Hastināpura, the legendary capital of the kings of the *Mahābhārata*, is identified with a village and its neighbouring mounds in Meerut District bearing the same name. Situated on a deserted bank of the Gangā, these mounds were excavated in 1950-52² and fully corroborated the ceramic sequence of Ahichchhatrā, apart from revealing the true position of the Painted Grey Ware.

The occupation of Hastināpura can be divided broadly into five Periods (fig. 6, above, p. 94). The first two Periods, characterized respectively by an ill-fired, ochre-coloured pottery³ and by the Painted Grey Ware have been described elsewhere (above, pp. 93-95). The second Period was brought to an end by an extensive flood, identified by the excavator with the flood which, according to the tradition recorded in the Purāṇas, was responsible for the shifting of the capital from Hastināpura to Kauśāmbī. Period III, from the early sixth to the early third century B.C., yielded punch-marked coins, copper and iron implements and the N.B.P. Ware. About 250 B.C. the entire township was destroyed by a large-scale fire.

After a temporary break, the site was re-occupied (Period IV) about 200 B.C., as evidenced by the presence of the coins of the rulers of Mathurā and Śuṅga terracottas in the lower levels of the Period. The brick-buildings of this Period reveal a thickly populated township (pl. XXXII). In the upper levels, dated to *circa* A.D. 300, were discovered imitation coins of the Kushan king Vāsudeva. After a long gap, a new settlement grew up here about A.D. 1100 and continued to flourish till the end of the fifteenth century. In the mid-levels of this Period, V, was found a coin of Balban (A.D. 1266-1287) and in the upper levels pre-Mughul glazed ware.

C. JAGATGRĀM

The narrow valley of the Yamunā, not far from its source, has recently revealed the site of an *asvamedha* sacrifice. Almost opposite the rock-edict of Aśoka at

¹ *Epigraphia Indica*, I (1892), pp. 61 ff.

² Lal, *op. cit.* (1952); above, pp. 93 ff.

³ *Ibid.*, p. 38.

EXPLORATION OF HISTORICAL SITES

Kalsi, on the left bank of the river, has been found a brick-built altar in the form of a *garuda* bird (pl. LIX A), with a large number of bricks inscribed with a recurring couplet in Sanskrit, from which we learn that this was the scene of the fourth *āsvamedha* sacrifice performed by a king Śilavarman (pl. LIX B and C). Palaeographically, the inscription is ascribed to the third century A.D.; and it is surmised that the performer of the sacrifice was a Yaudheya prince.¹

D. THE YAMUNĀ BASIN

There is reason to believe that several ancient towns lay further downstream on an old course of the river now followed largely by the Western Yamunā Canal. Śrughna of the *Mahābhārata*, identified by Cunningham with the mound of Sugh,² was one of these towns and was visited by Hiuen Tsang.³ From the coins obtained here, Sugh appears to have remained occupied from the late centuries before Christ down to the rule of the medieval Tomara rulers.

Modern Pānīpat is situated on a high mound which represents an ancient town of considerable dimensions. It has revealed the presence of the Painted Grey Ware and subsequent ceramics of early historic times. Indarpat (Sanskrit *Indraprastha*), the site of Purānā Qilā in Delhi, and Tilpat, 12 miles south, are two other sites which have revealed similar relics in trial-soundings.

Surface-exploration or accidental discoveries at other sites in the region confirm the general picture given above. Special mention may, however, be made of Mathurā, which is known to earliest literary traditions, particularly as the birth-place of Kṛishṇa. The Buddhist texts speak of Mathurā having been visited by Buddha. Later it formed part of the domains of the Nandas, Mauryas and Śuṅgas. The Śaka Satraps ruled here, and Kanishka made it the capital of his eastern dominion. Hiuen Tsang has left a detailed description of Mathurā of his times.⁴

No proper excavation has so far taken place here, but it has yielded a mass of stone sculptures,⁵ inscriptions, terracottas and coins. The earliest inscriptions are in Mauryan Brāhmī characters. Both the Painted Grey and N.B.P. Wares figure among the potsherds picked up here and at several neighbouring sites. In Kaṭrā Keshav Deva, where Kṛishṇa is believed to have been born, below the Hindu temple destroyed by the order of the Aurangzeb, are said to lie remains of a Buddhist settlement.⁶ A seated image of Bodhisattva dedicated by two nuns in the reign of Huvishka⁷ (pl. LX A), a statue of Kanishka (pl. LX B) and two other princes in Indo-Scythian costume,⁸ two sacrificial

¹T. N. Ramachandran, 'Āśvamedha site near Kalsi', *Jour. Oriental Res.*, XXI (1953), pp. 1 ff.

²*Arch. Surv. Ind. Rep.*, II, pp. 226 ff.

³Watters, *op. cit.*, I, pp. 317 ff.

⁴*Ibid.*, I, pp. 301 ff.

⁵See, for instance, *An. Rep. Arch. Surv. Ind.*, 1906-07, pp. 137 ff.; 1908-09, pp. 159 ff.; 1909-10, pp. 63 ff.; *Jour. U.P. Historical Soc.*, XI (1938), pt. ii, pp. 66 ff.; J. Ph. Vogel, *Catalogue of the Archaeological Museum at Mathura*, (Allahabad, 1910); *La Sculpture de Mathurā* (Paris, 1910); V. S. Agrawala, *Handbook of the Sculptures in the Curzon Museum of Archaeology, Muttra* (Allahabad, 1939); *A Catalogue of the Brahmanical Images in Mathura Art* (Lucknow, 1951).

⁶*An. Rep. Arch. Surv. Ind.*, 1911-12, pp. 16 ff.

⁷*Ibid.*, pp. 14 ff.

⁸*Ibid.*, pp. 120 ff.

pillars (*yūpas*), one of them inscribed,¹ and a sculptors' workshop² form other important discoveries of Kushan dates. In 1900, a Jaina *stūpa*, the only known of its kind, was also uncovered here and yielded a mass of Jaina sculptures of Kushan workmanship.³

5. CENTRAL GANGĀ BASIN

During the first three decades of the present century the archaeologist's spade was active at several sites in the central Gangā plains, but little attention was paid to close observation and systematic recording of stratification and of minor characteristic products. Uncovering the structures and collecting the sculptures, coins, sealings and epigraphs, in the largest numbers possible, were the order of the day. The current excavations at Kāušāmbī and Kumrāhār are, however, expected to make up this deficiency, and once the results of these excavations are published, we should have a reasonably clear picture of the successive cultural equipments of this part of the country. This zone is the primary home of the N.B.P. Ware, judging from its thick distribution and abundant occurrence. The commoner pottery here, from *circa* 500 B.C. to A.D. 500, has enough correspondence to that of the northern sites to indicate an intimate reciprocal contact and a largely common ceramic tradition.

Some of the earliest historical sites here are connected by literary tradition with the life of Buddha (*circa* 563-483 B.C.). Significantly enough, most of them also disclose the presence of the N.B.P. Ware. The places of his Birth, Enlightenment, First Sermon and Death are particularly holy to the Buddhists. The place of his Birth, the Lumbinī garden, has been identified with the modern village of Rummindei in the Nepal *terai*⁴ but has not been excavated. Bodh-Gayā in Bihar, where Buddha attained Enlightenment, has been an important centre of Buddhism throughout the ages, but the earliest known relics there consist of nothing more than some surviving sandstone railings of Śuṅga date.⁵ Sārnāth, near Banaras, and Kasiā, in Deoriā District, are the places respectively where Buddha preached his First Sermon and met his Death.

A. SĀRNĀTH

Sārnāth was excavated sporadically by far too many hands, including Cunningham,⁶ before its systematic excavation by the Archaeological Survey between 1904 and 1928,⁷ revealing a town of *stūpas* and monasteries, extensive in size and enlarged from time to

¹*An. Rep. Arch. Surv. Ind.*, 1910-11, pp. 40 ff.

²*Jour. U.P. Historical Soc.*, II (1919-20), pp. 135 ff.

³V. A. Smith, *The Jain Stupa and other Antiquities of Mathura*, Arch. Surv. Ind., New Imperial Series (Allahabad, 1901).

⁴*Epigraphia Indica*, V (1898-99), pp. 1 ff.

⁵*An. Rep. Arch. Surv. Ind.*, 1908-09, pp. 139 ff.; Benimadhab Barua, *Gaya and Buddha Gaya*, 2 vols. (Calcutta, 1934). For earlier exploration, see *Arch. Surv. Ind. Rep.*, I, pp. 4 ff.; III, pp. 79 ff.; VIII (1878), pp. 66 ff.; XI (1880), pp. 141 ff.; A. Cunningham, *Mahabodhi or the Great Buddhist Temple under the Bodhi Tree at Buddha Gaya* (London, 1892).

⁶*Arch. Surv. Ind. Rep.*, I, pp. 103 ff.

⁷*An. Rep. Arch. Surv. Ind.*, 1904-05 (1908), pp. 59 ff.; 1906-07, pp. 68 ff.; 1907-08, pp. 43 ff.; 1914-15 (1920), pp. 97 ff.; 1919-20 (1922), pp. 26 ff.; 1921-22, pp. 42 ff.; 1927-28 (1931), pp. 95 ff.; D. R. Sarni, *Guide to Buddhist Remains at Sarnath*, 5th ed. (Calcutta, 1933); B. Majumdar, *A Guide to Sarnath* (Delhi, 1937).

time (pl. LXI). Subsequently the N.B.P. Ware has also been noticed here, although its stratigraphic position remains uninvestigated.

The earliest structural remains at Sārnāth are dated to the Maurya period, and some of them are ascribed to Aśoka. Among the latter are the well-known inscribed sandstone column, with a lion-capital, which now takes the proud place of the national emblem of India (pl. LXII A), the circular core of the Dharmarājikā Stūpa built with wedge-shaped bricks and a monolithic railing which possibly crowned the *harmikā* of the Stūpa. The Stūpa was enlarged subsequently on several occasions between the Kushan period and the twelfth century. To the Kushan period belongs a colossal statue of standing Buddha, originally sheltered by an inscribed umbrella. A 60-ft. square Gupta temple, with rectangular chapels on three sides and a flight of steps on the fourth represents probably the 200-ft. high *mūlagandhakuṭi* noticed by Hiuen Tsang.¹ There are also several other statues bearing inscriptions of Gupta dates.

The Dhamekh Stūpa is 'a solid cylindrical tower, 93 feet in diameter at base and 143 feet in height including its foundations' (pl. LXII B).² Its lower facing, built with stone, is ornamented with carved floral designs. Cunningham, who drove a shaft through its centre, found a slab 3 ft. below the surface inscribed with the well-known formula of the Buddhist creed in characters of the sixth-seventh centuries. At a depth of 110 ft. from the top he encountered an earlier brick-built structure. The Chaukhandī mound, about half a mile south of the main ruins, crowned by an octagonal tower built at the time of Akbar, represents the ruins of a large Buddhist *stūpa* or temple. One of the latest inscriptions at Sārnāth records the construction of a *vihāra* by Kumāradevī, the Buddhist queen of Govindachandra of the Gāhāḍavāla dynasty of Kanauj (A.D. 1114-54). In course of time Sārnāth became holy even to Hindus and Jainas, whose structures and statues are by no means negligible in workmanship and number.

B. KASĪĀ

Kuśinagara, where end came to Buddha, was identified by Cunningham with Kasīā in Deoria District, U.P. and partially excavated by A. C. L. Carlleyle in 1876.³ He uncovered what is generally referred to as the Nīrvāṇa Stūpa. Later, between 1904 and 1912, it was intermittently excavated by the Archaeological Survey.⁴ A shaft driven through its centre resulted in the discovery of a copper plate, partly engraved and partly written in ink with the *Nidānasūtra*, a Buddhist text, in Gupta characters. Of the several monasteries, the latest was erected by a local Kalachuri prince in the twelfth century. A silver coin of Kumāragupta and over a thousand seals and sealings of the Gupta and subsequent periods constitute other noteworthy finds.

C. RĀJGIR

Rājagriha, Śrāvastī, Vaiśālī, Sāṅkāśya⁵ and Kauśāmbī are some of the other important places associated with the life of Buddha. Of these, Rājagriha, modern

¹ Watters, *op. cit.*, II, p. 48.

² Majumdar, *op. cit.*, p. 67.

³ *Arch. Surv. Ind. Reps.*, I, pp. 76 ff.; XVIII (1883), pp. 55 ff.; XXII (1885), pp. 16 ff.

⁴ *An. Rep. Arch. Surv. Ind.*, 1904-05, pp. 41 ff.; 1905-06, pp. 61 ff.; 1906-07, pp. 44 ff.; 1910-11, pp. 63 ff.; 1911-12, pp. 134 ff.

⁵ Identified with Sankisā in Farukhābād District. See *Arch. Surv. Ind. Reps.*, I, pp. 217 ff.; XI, pp. 22 ff.

Rājgir, about 60 miles south-east of Patna, was known anciently by several names, Rājagriha being one of the latest and more popular. According to the *Mahābhārata*, Jarāsandha, an adversary of the Pāṇavas, ruled here. In more historical days it was the capital of Magadha, and Buddha visited it frequently during the reigns of Bimbisāra (circa 543-491 B.C.) and his son Ajātasatru (circa 491-459 B.C.). The First Buddhist Council was also held here soon after his death. Mahāvira, the last Jaina Tirthaṅkara, is said to have passed several rainy seasons here, and the Jains hold it holy also as the birth-place of their twentieth Tirthaṅkara, Muni Suvrata.¹

The site still awaits a planned and systematic excavation, but a recent scraping made in a section cut by a rivulet yielded interesting data.² The occupation suggested a sequence of four periods, but whether this would hold good for the entire site is yet to be seen. The lowest signs of habitation showed fragmentary dull-red sherds, and above them was a clear deposit of the N.B.P. Ware, assigned to circa 500-200 B.C. The third and fourth periods, in which the N.B.P. Ware was absent, were dated respectively to the first century B.C. and the first century A.D. A hitherto-unknown type of post-cremation burial came to light in the lower levels yielding the N.B.P. Ware; a pit with an elliptical bottom and an additional cylindrical base was first dug and lined with clay; then the bones left after cremation were interred in it, and the hollowed-out 'urn' sealed with clay again.

The earlier work at Rājgir consisted mainly of clearance and identification of its various features, such as neighbouring woods, hills and caves, with those mentioned in indigenous literature and the accounts of the Chinese pilgrims Fa-Hien and Hiuen Tsang.³ Situated in a long valley, the natural defences of the city were first strengthened by building a high rampart of rubble on the hills, about 25 miles in circuit (pl. LXIII). A smaller citadel inside it, pentagonal in shape, was later encircled by an earthen wall of rubble core. Outside the valley, another fortified town, known as New Rājagriha, is said to have been built by Ajātasatru.

Maṇiyār Maṭh, a cylindrical brick structure in the valley, surrounded by a stone compound-wall, was first excavated by Cunningham and later by the Archaeological Survey. This hollow edifice, built over earlier stone buildings, was enlarged several times, including in the late Gupta period, when niches were provided on its outer face for accommodating Brahmanical images modelled in stucco. Among the sculptures found around it is a sculpture with Nāga figures inscribed with the name Maṇināga, a serpent-deity whose shrine at Rājgir is mentioned in the *Mahābhārata*.

D. SAHETH MAHETH

Buddha passed many years of his life at the Jetavana monastery at Śrāvastī, the capital of Kosala.⁴ The accounts left by Fa-Hien and Hiuen Tsang and an inscribed

¹ B. C. Law, *Rājagriha in Ancient Literature*, Mem. Arch. Surv. Ind., no. 58 (Delhi, 1938).

² A. Ghosh, 'Rājgir 1950', *Ancient India*, no. 7, pp. 66 ff.

³ *Arch. Surv. Ind. Rep.*, I, pp. 20 ff.; III, pp. 140 ff.; *An. Rep. Arch. Surv. Ind.*, 1905-06, pp. 86 ff.; 1913-14 (1917), pp. 265 ff.; 1925-26 (1928), pp. 121 ff.; 1930-34, pp. 30 ff.; 1935-36 (1938), pp. 52 ff.; 1936-37 (1940), pp. 45 ff.; D. N. Sen, 'Sites in Rājgir associated with Buddha and his disciples', *Jour. Bihar and Orissa Res. Soc.*, IV (1918), pp. 113 ff.; Sen, *Rājgir and its Neighbourhood* (Patna, 1924); R. C. Majumdar, 'Identification of some old sites in Rājagriha', *Jour. Roy. Asiatic Soc. Bengal*, XV (1949), pp. 65 ff.; M. H. Kuraishi and A. Ghosh, *A Guide to Rājgir*, 3rd. ed. (Delhi, 1951).

⁴ B. C. Law, *Śrāvastī in Indian Literature*, Mem. Arch. Surv. Ind., no. 50 (Delhi, 1935).

EXPLORATION OF HISTORICAL SITES

image of Bodhisattva enabled Cunningham to identify it with the twin villages of Saheth-Maheth in Gondā and Bahraich Districts of Uttar Pradesh.¹ Subsequent excavations brought out another inscribed statue, setting at naught the lingering doubts regarding its identification.² It is clear now that Jetavana is represented by Saheth and Śrāvastī by Maheth.³ At Saheth a *stūpa* yielded a sandstone casket containing bones, a gold leaf and a silver punch-marked coin. At Maheth, a fortified town-site, containing, among other things, ring-lined soak-wells, were discovered an ivory seal, inscribed in characters of the fourth-fifth centuries A.D., and a hoard of coins, including those of the Kushan king Vāsudeva. In a ruined shrine also turned up more than three hundred terracotta panels in Gupta style, portraying episodes from the *Rāmāyaṇa*. The enlargements to the buildings continued till the eighth-ninth centuries.

E. BASĀRH

Vaiśālī, the reputed birth-place of Mahāvīra and the capital of the oligarchical Lichchhavis from early times, was the scene of the Second Buddhist Council held about a hundred years after Buddha's death. Identified with Basārh, in Muzaffarpur District,⁴ the fortified ruins of this city were superficially excavated in 1903-04 and 1913-14⁵ and several strata of fragmentary structures exposed. The excavations yielded a sealing of the second-third century B.C., and several hundred others of various dates down to the fifth century A.D.

The hollow lid with vase-shaped knob, the narrow-mouthed sprinkler-jar and the narrow-necked globular jar (similar to fig. 6, 3, 4, 10 and 14), characteristic of the early centuries of the Christian era, are identifiable among the published photographs of pottery. Subsequent exploration has also revealed here, as only to be expected, the presence of the N.B.P. Ware.

F. KAUSĀMBĪ

According to the Purāṇas, Hastināpura, the capital of the Pāṇḍavas, was swept away by floods at the time of Nichakshu, fifth in descent from Parīkshit, the grandson of Arjuna. The capital was then shifted to Kauśāmbī, modern Kosam, 38 miles from Allahabad, on the northern bank of the Yamunā. The excavation here has revealed no evidence yet to confirm this tradition, but there is ample evidence to support Buddha's association with Kauśāmbī, referred to in Buddhist texts.⁶

The site has attracted attention from time to time.⁷ A small-scale excavation was conducted here in 1937-38, and since 1948 the University of Allahabad has been excavating here continuously with encouraging results.

¹Arch. Surv. Ind. Rep., I, pp. 330 ff.; XI, pp. 78 ff.

²An. Rep. Arch. Surv. Ind., 1908-09, pp. 133 ff.

³Ibid., 1907-08, pp. 81 ff.; 1910-11, pp. 1 ff.

⁴Arch. Surv. Ind. Rep., I, pp. 55 ff.; XVI (1883), pp. 6 ff.

⁵An. Rep. Arch. Surv. Ind., 1903-04, pp. 81 ff.; 1913-14, pp. 98 ff.

⁶For traditional and literary accounts of Kauśāmbī, see N. N. Ghosh, *Early History of Kauśāmbī* (Allahabad, 1935); B. C. Law, *Kauśāmbī in Ancient Literature*, Mem. Arch. Surv. Ind., no. 60 (Delhi, 1939).

⁷Arch. Surv. Ind. Rep., I, pp. 301 ff.; X (1880), pp. 1 ff.; XXI (1885), pp. 1 ff.; An. Rep. Arch. Surv. Ind., 1913-14, pp. 261 ff.; 1921-22, pp. 45 ff.

Coins, beads, seals, terracottas and sculptures form the main acquisition from this excavation. But far more interesting is the sequence of occupations and the pottery associated with it. Above the lowest levels containing unidentified fragments of a coarse grey ware there is a barren deposit of clay. The next occupation starts practically with the N.B.P. Ware in about the sixth century B.C. Uninterrupted strata of occupation, with a unique mass of datable objects, continue right through the periods of the Mauryas, Śuṅgas, Kushans and Guptas till the time of the Hūṇas, a seal counter-struck with the name of Toramāṇa throwing interesting light on the extent of Hūṇa influence. Another interesting discovery is a seal of Kanishka.

According to the Buddhist tradition, among the monasteries built here by prominent merchants was Ghoshitārāma, built by Ghoshita. It was the scene of many a sermon by Buddha and is described in detail by Hiuen Tsang.¹ Happily, the remains of this monastery have now been identified in a corner of the fortified city with the help of inscriptions found in recent excavations (pl. LXIV).

G. BHĪTĀ

About 35 miles downstream from Kauśāmbī lies a series of mounds at Bhīṭā. These mounds were superficially excavated in 1909-10 and 1911-12² and appeared to the excavator to represent an ancient military station and a mercantile township. The long occupation, ranging from an age prior to the Mauryas to the Gupta times, has been divided into five periods. Among the objects obtained are the N.B.P. Ware, punch-marked, unscripted cast, tribal and Kushan coins, terracotta figurines and religious and mercantile sealings of Kushan and Gupta dates.

H. PATNA

Among other ancient cities of the central Gangā basin, largely contemporary with those described above, Patna, ancient Pāṭaliputra, occupies an important place. Ajātaśatru's successor, Udayin (circa 459-443 B.C.), transferred the capital of Magadha to this place from Rājagṛha, and the Third Buddhist Council during Aśoka's rule was held here. The Mauryas retained it as their capital, and Megasthenes, the Greek envoy at Chandragupta's court (circa 322-298 B.C.), describes it as a flourishing city on the confluence of the Gangā and Son, 9 miles in length and 1½ miles in width, enclosed by a wooden palisade, which was pierced with loopholes for discharging arrows. Below the rampart ran a defensive ditch which also carried the city's sewage.³

The high water-table and the present city, largely situated on the ancient settlement, have not permitted excavations on a large enough scale. But the accidental discoveries of terracottas, carved ring-stones and beads, all ranging on stylistic grounds from the Maurya to Gupta periods, disclose the antiquity of the site. Besides, the presence of the N.B.P. Ware suggests that a systematic excavation might bring even earlier occupations to light.

¹ Watters, *op. cit.*, I, p. 369.

² John Marshall, 'Archaeological explorations in India, 1909-10', *Jour. Roy. Asiatic Soc.*, 1911, pp. 127 ff.; *An. Rep. Arch. Surv. Ind.*, 1909-10, pp. 40 ff.; 1911-12, pp. 29 ff. For earlier exploration, see *Arch. Surv. Ind. Rep.*, III, pp. 46 ff.; X, pp. 5 ff.

³ J. W. McGrindle, *Ancient India as Described in Classical Literature* (Westminster, 1901), pp. 42 f.

Two sites have, however, been worked on to some extent. At Kumrāhār, during the excavations of 1912-16,¹ below some brick structures assigned to the Gupta period, eighty heaps of polished stones, in eight rows of ten heaps each, were discovered amidst a deposit of charcoal and ash. There was an interval of 15 ft. from heap to heap. This was taken to be the site of a pillared hall of Mauryan date, the wooden superstructure of which was assumed to have caved in as a result of a conflagration, leaving an ashy deposit. To the south of this hall were discovered seven wooden platforms, each 30 ft. long, 5 ft. wide and 4½ ft. high, but their purpose remained unascertained. The excavator, D. B. Spooner, ascribed a Persepolitan origin to the hall and put forth the astounding view that the pillars of the hall had sunk—in fact, were probably still sinking—deep into the soft slimy earth underneath. The current excavation here by the K. P. Jayaswal Research Institute, Patna, has revealed that the missing pillars, or the surviving stumps thereof, were removed during the second century B.C. after the conflagration. An enormous brickwork and structures from the Mauryan to late Gupta times have also come to light in recent excavations (pl. LXV). These include a monastic establishment, known as Ārogya-vihāra according to a clay sealing.²

Corresponding roughly to the late Mauryan, Śuṅga, Kushan, Gupta and late Gupta times, the occupation here has been divided into five periods. From the lowest levels dated prior to *circa* 150 B.C. come lipped bowls of a black-on-red ware, interlocked with coarse grey and red pottery and sherds of the N.B.P. Ware. The succeeding pottery is red and often coarse in texture and contains shapes common with other early historical sites in northern India. Punch-marked, uninscribed cast, Kushan and Kauśāmbī issues figure among the coins recovered here, and particularly charming are some terracottas of Gupta workmanship (pl. LXVI).

At Bulandībāgh,³ again below some brick buildings of Gupta date, was found a unique wooden construction, consisting of a series of 14-ft. long wooden planks at bottom, flanked by 15-ft. high wooden uprights, which were spanned on top by tenoned planks, the entire arrangement making a hollow passage. This structure was uncovered to a length of 250 ft. without reaching its end. It was identified with the wooden palisade mentioned by Megasthenes. A similar wooden structure without, however, the bottom planks, also came to light accidentally at Gosain-khāṇḍa,⁴ half a mile east of Bulandībāgh.

I. RĀJGHĀT

Vārānaśī, from which the name of modern Banaras is derived, was known as a great city from early times, but it was an accidental discovery that disclosed its exact location. In 1940, while earth was being removed for reconstructing the railway-station at Rājghāt, north of Banaras, on the bank of the Gangā, a mass of ancient structures and other relics comprising clay sealings, terracotta figurines and distinctive pottery, including the N.B.P. Ware, came to light. The top deposit of 13 ft. had already been removed by railway-contractors by the time the Archaeological Survey reached the scene for 'salvage'

¹ *An. Rep. Arch. Surv. Ind.*, 1912-13, pp. 53 ff.; *Progress Rep. Arch. Surv. Ind.*, Eastern Circle, 1912-13, pp. 55 ff.; 1913-14, pp. 45 ff.; 1915-16, pp. 27 ff. For earlier explorations, see *Arch. Surv. Ind. Rep.*, VIII, p. 24; L. A. Waddell, *Report on the Excavations at Pataliputra* (Calcutta, 1903).

² Information from Dr. A. S. Altekar and Shri Vijayakanta Mishra.

³ *An. Rep. Arch. Surv. Ind.*, 1926-27 (1930), pp. 135 ff.

⁴ *An. Rep. Arch. Surv. Ind.*, 1935-36, pp. 54 f.

operations¹ which revealed, among other brick structures, a large temple hall supported on twelve pillars and a large mass of the N.B.P. Ware, but the natural soil was not struck.

J. PIPRĀWĀ

Among the *stūpas* in this region, the *stūpa* at Piprāwā in Basti District is the only one of a probable pre-Aśokan date. It yielded a vase inscribed in characters apparently pre-Aśokan and a gold leaf bearing a female figure with exaggerated hips, possibly a representation of the Goddess of Fertility.²

K. LAURIYĀ-NANDANGARH

In Champāran District of Bihar, at Lauriyā there is an inscribed pillar of Aśoka and fifteen *stūpas*. The site was explored and partially excavated by Cunningham and his assistants H. B. W. Garrick and A. C. L. Carlleyle.³ In 1904-07 four of the mounds were excavated by the Archaeological Survey under Th. Bloch, and others were re-excavated in 1935-37 under N. G. Majumdar.⁴ In Bloch's excavation one of the *stūpas* was found to contain a deposit of burnt bones with charcoal, and another yielded a gold leaf with a female figure akin to the one from Piprāwā. Bloch labelled the mounds as Vedic burial tumuli, but there is no evidence to support this. A more probable view is that they represent Buddhist *stūpas*.

Nandangarh, about a mile south-west of the Aśokan pillar, represents a fortified habitation-site, in the eastern corner of which is a 80-ft. high mound, which was excavated in 1935-39 and revealed a large *stūpa* having a polygonal base and rising in terraces. In the earthen core of the *stūpa* were found punch-marked and cast copper coins, terracotta figurines and clay sealings of the first century B.C. Further down, 35 ft. below the structural surface, was found a complete miniature *stūpa*, beside which lay a copper vessel containing a long strip of a birch-bark Buddhist manuscript written in characters of the early fourth century. It was evident that the *stūpa* had been reconsecrated about that date by cutting through the structure from above.

L. NĀLANDĀ

According to literary tradition, Nālandā, 6 miles north of Rājgir, was visited by Buddha and Mahāvīra. Aśoka is said to have made offerings here at the *chaitya* of

¹ Krishna Deva, 'Excavations at Rājghāt near Benares', *Annual Bibliography of Indian History and Indology*, III (Bombay, 1944), pp. xli f.; V. S. Agrawala, 'Rajghat terracottas', *Jour. U.P. Hist. Soc.*, XIV (1941), pt. i, pp. 1 ff.

² W. C. Peppé and V. A. Smith, 'The Piprahwa stupa, containing relics of Buddha', *Jour. Roy. Asiatic Soc.*, 1898, pp. 573 ff.

³ *Arch. Surv. Ind. Rep.*, I, pp. 68 ff.; XVI, pp. 104 ff.; XXII, pp. 47 ff.

⁴ *An. Rep. Arch. Surv. Ind.*, 1904-05, pp. 38 ff.; 1906-07, pp. 119 ff.; 1935-36, pp. 55 ff.; 1936-37 pp. 47 ff.

Śāriputra, Buddha's disciple, and erected a temple. But the excavations carried out by the Survey from 1916 onwards have not revealed any relics of a pre-Gupta date.¹

By the time of Harsha (A.D. 606-648), Nālandā had become the main centre of Mahāyāna cult and a centre of learning—a so-called university—with a vast campus of temples and monasteries. The Chinese pilgrims Hiuen Tsang and I-tsing both studied at Nālandā and have left detailed descriptions of the settlement and its life.²

The main temple and three smaller ones stand here in a row, south to north, with open spaces between them. The square structure of the main temple (pl. LXVII), at the southern end of the row, is surrounded by several votive *stūpas* and shows seven successive additions, horizontal and vertical. During the fifth rebuilding in about the sixth century, corner-towers and niches with stucco figures were added to adorn the enlarged structure (pl. LXVIII). The three other temples likewise show two stages of accretions and are surrounded by votive *stūpas*. The objects of worship in each case were colossal stucco images of Buddha.

To the east of the rows of temples lie eight monasteries in a row, while two others form an oblique corner in the south-east. The monasteries take the form of a quadrangle enclosing cloistered cells on the inside (pl. LXIX). Within the quadrangle or in the cell facing the entrance is usually a shrine for worship. A square temple to the east of the monasteries is decorated along its base with panels of sculpture, Brahmanical and Buddhist, and other motifs.

Nālandā has yielded a number of stone sculptures and terracotta plaques and a still larger number of bronzes, indicating the existence of a flourishing school of bronze-casting (pl. LXX). The seals and sealings from here, private and of corporate bodies, including those of the monasteries, belong mostly to the Gupta and Pāla periods and are particularly valuable as sources of history. Datable evidences are furnished by the coins of Kumāragupta I (A.D. 414-455), Narasimhagupta (circa A.D. 470-479), Śaśāṅka (first half of the seventh century), Adivarāha or Bhoja I (circa A.D. 840-890) and Govindachandra of the Gāhaḍavāla dynasty (A.D. 1114-1154). The bulk of the establishments at Nālandā, however, belong to the period of the Pālas, who were great patrons of Mahāyāna Buddhism.

6. RĀJPŪTĀNĀ

Archaeologically, Rājputānā is still largely *terra incognita*. This is partly due to the fact that it is made up of ex-Princely States, only a few of which promoted archaeological research, and partly to the desert-character of the region, which has been generally misconceived as incapable of having sustained civilization in ancient times. In fact, however, civilization is of high antiquity in Rājputānā, geographically and culturally divisible into two regions to the north and south of the Aravalli hills. Beginning with protohistoric times civilization flourished along the rivers Sarasvatī and Drishadvatī, now dried up in the northern sandy region; in later periods it was nurtured particularly in the green and fertile belts to the south of the Aravalli hills.

¹ *An. Rep. Arch. Surv. Ind.*, 1922-23, pp. 104 ff.; 1923-24 (1926), pp. 70 ff.; 1924-25 (1927), pp. 82 ff.; 1925-26, pp. 100 ff.; 1926-27, pp. 127 ff.; 1927-28, pp. 97 ff.; 1928-29 (1933), pp. 85 ff.; 1929-30 (1935), pp. 135 ff.; 1934-35 (1937), pp. 38 ff.; 1935-36, pp. 50 ff.; 1936-37, pp. 42 ff.; A. Ghosh, *Guide to Nālandā*, 3rd. ed. (Delhi, 1946). For earlier exploration, see *Arch. Surv. Ind. Rep.*, I, pp. 28 ff.; VIII, pp. 79 ff.; A. M. Broadley, *Ruins of the Nālandā Monasteries at Burgaon* (Calcutta, 1872).

² Watters, *op. cit.*, II, pp. 164 ff.; J. Takakusu, *A Record of the Buddhist Religion* (Oxford, 1896).

A. BIKANER

Sporadic work has been carried out on several sites in Rājputānā.¹ In 1940-41, Aurel Stein surveyed Bikaner and Bahawalpur States, mainly in search of prehistoric and protohistoric remains. Recently the Department of Archaeology has covered the dried-up beds of the Sarasvatī and Drishadvatī. Although the chief contribution of this survey lies in a definite identification of Harappā settlements in the region, it has also revealed the existence of the Painted Grey Ware (above, pp. 96) and a new ceramic tradition of the early centuries of the Christian era, approximately contemporaneous with Kushan and early Gupta periods.² This tradition, designated the 'Rangmahal' culture from the type-site near Sūratgarh in Bikaner, just now excavated by the Royal Swedish Expedition,³ consists of a red ware painted with characteristic designs in black (figs. 10 and 11). Curiously enough, these designs show certain resemblances with Harappā motifs, but for all we know at present, they may be a regional product with little dispersal outside Rājputānā. From the site of Rangmahal some terracotta plaques in early Gupta tradition (pl. LXXI) had been found by Tessitori. Moulded beautifully, they usually treat of mythological subjects.

B. UDAIPUR

The N.B.P. Ware is found at Bairāt in Jaipur, where certain distinctive plain pottery-types are also found to be identical with those of the northern region. On the other hand, at Dhūlkoṭ near Āhār (ancient Āghāṭa not far from the town of Udaipur) has been noticed a black-and-red ware industry, indicative of the inverted firing technique.⁴ Often the pots are painted with dots and lines in white. This ware underlies plain red wares of Kushan period, but its relationship with other known wares and the extent of its distribution still remains to be ascertained. It is conceivable to regard it as an extension from western India, where the technique of black-and-red ware was already established before the middle of the first millennium B.C., possibly even earlier (below, pp. 158 ff.).

C. BAIRĀT

Fifty-two miles north of Jaipur, situated in a narrow valley, is the small town of Bairāt, one of the few sites excavated in Rājputānā. It was visited first by Cunningham and subsequently by his assistant A. C. L. Carlleyle.⁵ Later, excavation was carried out here by the Archaeological Department of Jaipur State.⁶

¹ See, for instance, references to L. P. Tessitori's work in Bikaner in *An. Rep. Arch. Surv. Ind.*, 1917-18, pt. i (1920), pp. 21 ff. and 37; 1918-19, pt. i, (1921), pp. 22 f.

² A. Ghosh, 'The Rājputana desert—its archaeological aspect', *Bulletin National Inst. Sciences of India*, no. 1 (1952), pp. 37 ff. The priority of the Painted Grey Ware settlements to the Rangmahal ones was evident from surface-examination and was also stratigraphically established at a site called Rer, 32 miles south-west of Rangmahal (pl. LXXII).

³ Hanna Rydh, 'The Swedish archaeological expedition to India', *Antiquity*, XXVII, no. 107 (1953), pp. 169 f.

⁴ Sherds from Āhār examined through the courtesy of Dr. S. P. Srivastava.

⁵ *Arch. Surv. Ind. Rep.*, II, pp. 242 ff.; VI (1878), pp. 91 ff.

⁶ D. R. Sahnī, *Archaeological Remains and Excavations at Bairāt* (Jaipur).

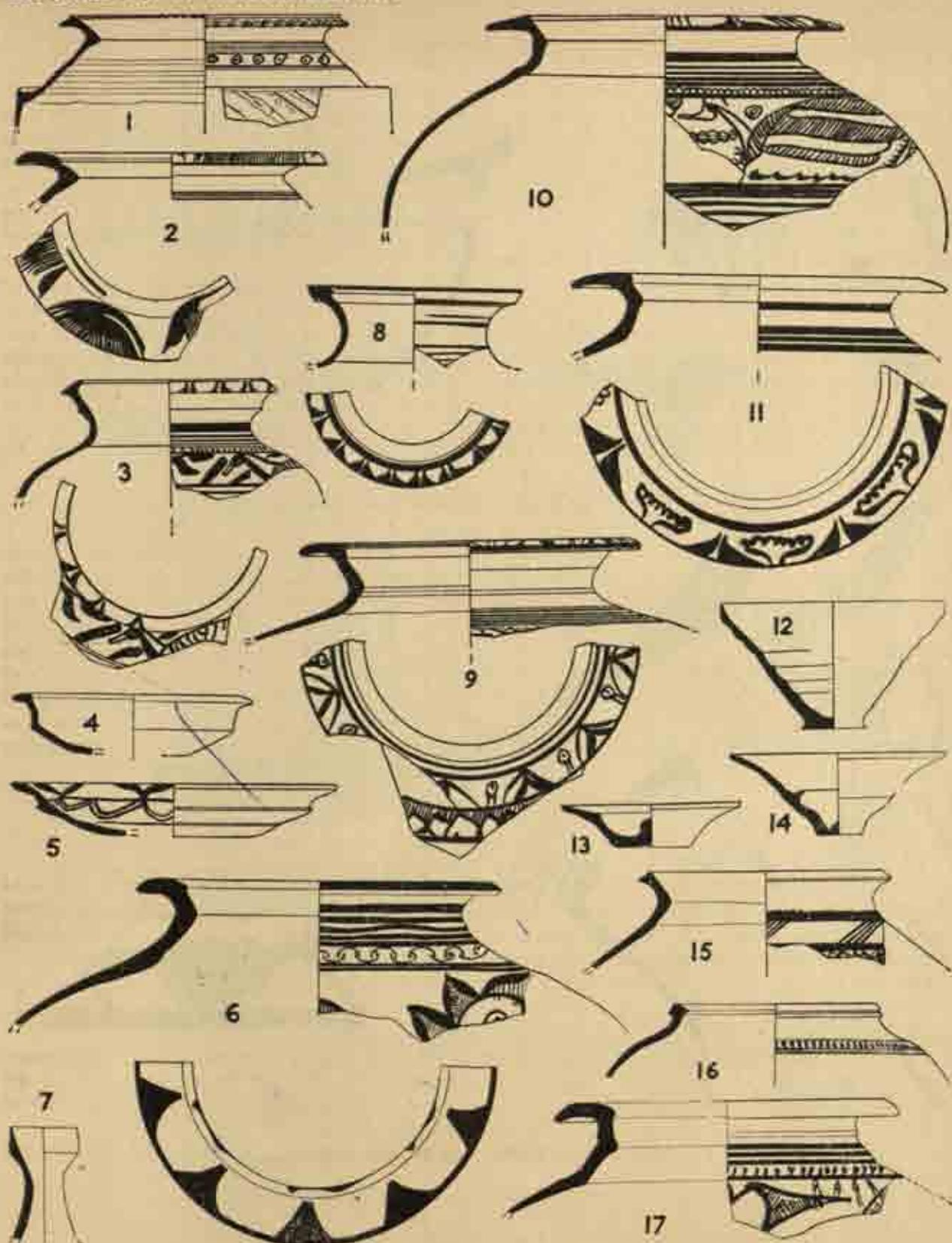


FIG. 10. Representative pottery-types of 'Rangmahal' culture. $\frac{1}{4}$

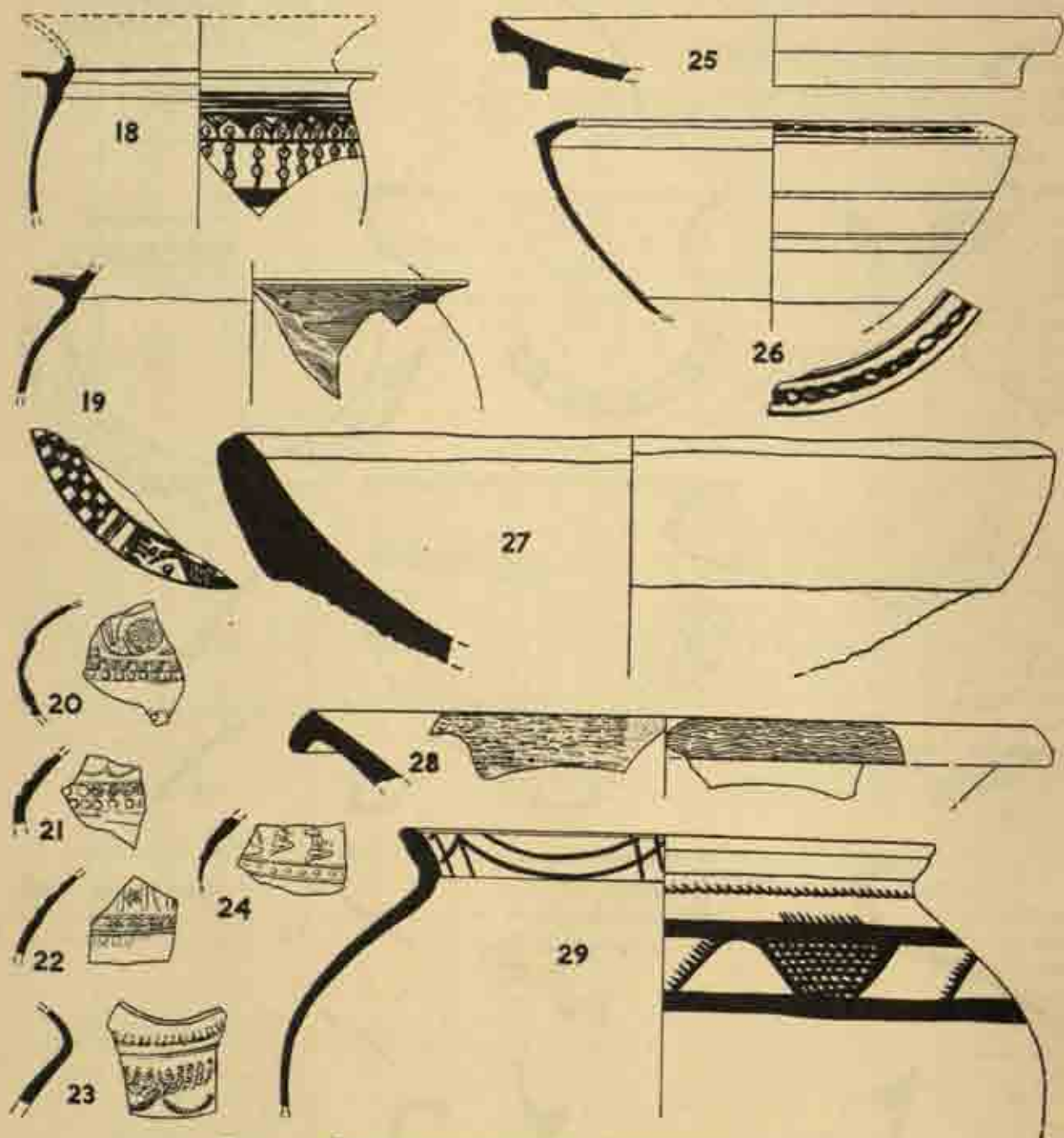


FIG. 11. Representative pottery-types of 'Rangmahal' culture. $\frac{1}{2}$

EXPLORATION OF HISTORICAL SITES

A stone edict of Aśoka, the so-called Bhābrū Rock-edict, now in Calcutta, had been known from this place for a long time. Subsequently another rock-edict was discovered about a mile from the site. The excavation revealed a heap of polished and unpolished pieces of stone, no doubt parts of one or more pillars and a monastery and an interesting type of temple, built during the Maurya period. The latter consisted of a circular brick-built chamber, on the outer face of which panels of plaster alternated with octagonal wooden columns.¹ The chamber was enclosed by an encircling wall leaving an ambulatory passage around the central structure.

Terracotta figurines, beads and punch-marked and Indo-Greek coins formed other important objects recovered in the excavation. The pottery was not classified according to the observed strata, but the published account and illustrations reveal that in addition to the N.B.P. sherds, some of them rivetted with copper pins, there were also coarse grey dishes usually associated with this pottery. To the early centuries of the Christian era belong waisted miniature jars, miniature bottles with slight carination above base, lids with lamps on rim, jars with thickened rim and reed-impressed pattern (similar to fig. 6, 6, 8, 30 and 31) and clay lamps with a central tube to suspend them, all of which occur also at northern sites. Potsherds with impressed designs, characteristic of these centuries, are also present.

D. RAIRH

Fiftysix miles south of Jaipur, Rairh also revealed evidence of occupation from the third century B.C. to the second century A.D., with traces of later occupation of Gupta times.² Soak-wells lined with baked clay rings were found here in very large numbers, and there were numerous coins consisting of hoards of punch-marked and Mālwa coins (circa 200 B.C.-A.D. 200) and Mitra coins. Terracotta figurines, beads, seals and distinctive pottery make up the other finds. Pottery decorated with impressed motifs, concave lids with looped handle (similar to fig. 5, 11), vase-knobbed lids and miniature bottles with carination above the base (similar to fig. 6, 3-4 and 8) form some of the characteristic types of the early centuries A.D.

E. SĀMBHAR

Sākambharī, modern Sāmbhar, known for its salt-lake and familiar to historians as the capital of the Chāhamāna princes, was first occupied in much earlier times. Amateur hands had excavated here a mass of objects,³ which included a faceted sealing, not identified at the time, but later dated palaeographically to the third century B.C. The more recent work here in 1936-38⁴ confirmed its occupation from the third century B.C. to the tenth century A.D., the exposed structures falling mainly between the second century B.C. and the ninth century A.D. The coins found here comprise punch-marked, Indo-Greek, Yaudheya and late Indo-Sassanian issues.

¹ Cf. S. Piggott, 'The earliest Buddhist shrines', *Antiquity*, XVII, no. 65 (1943), pp. 2 ff.

² K. N. Puri, *Excavations at Rairh* (Jaipur).

³ T. H. Hendley, 'Buddhist remains near Sambhur', *Jour. Roy. Asiatic Soc.*, XVII (1885), pp. 29 ff.

⁴ D. R. Sahnī, *Archaeological Remains and Excavations at Sāmbhar* (Jaipur).

F. NAGARĪ

Eight miles north of Chitorgarh, the site of Nagarī (ancient Madhyamikā) has also been superficially excavated.¹ Punch-marked and Mālwā coins, inscribed stones, moulded plaques and sculptures found here suggest the occupation of the town from circa third century B.C. to seventh century A.D. At the centre of the mound was an early Gupta temple dedicated to Śiva. Recent exploration here has also yielded the Red Polished Ware known from western India and also Kshatrapa coins.

7. EASTERN INDIA

Of the two distinct physiographic divisions of Bengal, the northern and southern, the former is an older geological formation, but civilization existed over both of them from early historical times. The northern portion, the Varendra country of old, however, sustained a thicker population on account of its higher altitude and other conditions favourable to sustenance. The earliest historical remains in Bengal are assigned to the Maurya period, but the occurrence of the N.B.P. Ware at Bāngarh, Tamluk and Gaur (above, p. 119) opens up the possibility of the discovery of even earlier occupations. The excavated pottery from various sites has never been classified, but the few illustrations that have appeared in different publications make it abundantly clear that only a very limited range of north Indian types has analogues in the material from Bengal. Apparently, the types for the most part evolved regionally, but there was some contact between the traditions of the north and of the lower Gangā tract. In the absence of stone the craftsmen of Bengal had to fall back on clay, their terracotta plaques revealing a unique continuity of development and an unsurpassed skill from the seventh to the eighteenth century.

To the north in Assam, the ancient Kāmarūpa, the picture is rather vague. On one hand we have menhirs and dolmens of uncertain date, and on the other there are the temples and sculptures of medieval times, the more remarkable of them being near Tezpur and Gauhati.² Near Tezpur, the old temple at Dahi Parbatīyā has preserved a beautifully carved door-jamb in late Gupta tradition.³ To the east of Sadiya, near Bhīshmāknagar, the ruins of the so-called Tāmreśvarī temple have revealed some beautiful terracotta plaques in medieval style.⁴

A. TAMLUK

Referred to in Indian literature by different names, such as Tāmraliptā, Dāmaliptā, Tāmraliptī or Tāmraliptikā, the port from where Indian seacraft sailed to the islands in the Indian Archipelago and China is identified with Tamluk on the Rūpnārāyan river in Midnāpur District.⁵ It is mentioned by Ptolemy under the name of Tāmalitēs, from

¹D. R. Bhandarkar, *Archaeological Remains and Excavations at Nagarī*, Mem. Arch. Surv. Ind., no. 4 (1920). For earlier work, see *Arch. Surv. Ind. Rep.*, VI, pp. 196 ff.; Kavi Raj Shyamal Das, 'Antiquities at Nagarī', *Jour. Asiatic Soc. Bengal*, LVI, pt. i (1887), pp. 74 ff.

²See, for example, *An. Rep. Arch. Surv. Ind.*, 1924-25, pp. 94 ff.

³*Ibid.*, pp. 98 ff.

⁴*Ibid.*, 1906-07, pp. 25 ff.

⁵*Ibid.*, 1921-22, pp. 74 ff.

EXPLORATION OF HISTORICAL SITES

Prakrit *Tāmalitti*, and was visited by the Chinese pilgrims Fa-Hien (399-414), Hiuen Tsang (629-645) and I-tsing (673-693).

The site has not been excavated so far, except for a few trial-trenches sunk in 1940.¹ The objects picked up here on surface or recovered during the superficial excavation contain, however, sufficient evidence of its high antiquity. The N.B.P. Ware, silver and copper punch-marked coins, rectangular cast coins and a large number of terracotta figurines are among these objects.

B. BĀNGARH

Bāngarh in Dinājpur District, anciently known among others by the names of Koṭivarsha and Devīkoṭa, lies on the banks of the Punarbhavā, which replenishes the waters of the Padmā, a major tributary of the Gangā. It was excavated by the University of Calcutta during 1937-41² and again in 1951.

Five strata dating from the Maurya period to the tenth-eleventh centuries were recognized here by the excavators. In the lowest occupation was exposed a ring-lined soak-well; the potsherds from this level included specimens of the N.B.P. Ware. The second period, coeval with the reign of the Śuṅgas, was characterized by prosperous buildings, drains, cess-pits, and a brick-built rampart-wall. Terracotta figurines, typically Śuṅga in moulding technique and features, were among the objects from this level. The pottery from the third period, covering the Kushan and Gupta times, shows various impressed decorative motifs. During this period and the following one, when the Pālas had come on the scene, the rampart-wall was raised higher. A unique lotus-shaped small tank, originally covered with a pillared canopy, belongs to the Pāla period. With the tank at the centre, the primary plan of the building is cruciform, a chamber on each corner communicating with the tank. Carved bricks and stone sculptures form other evidence of this period. The buildings of the last period have not survived, but the abundance of glazed potsherds leaves no doubt as to the age of the top levels.

The plain pottery from Bāngarh (fig. 12) is quite different from the types found at the sites on the upper and central Gangā, although a contact with the north and development on parallel lines is certainly indicated. The Kushan and Gupta levels show impressed designs, albeit the motifs are different from those found in the north.

A vase-knobbed (fig. 12, II, 13) lid and a miniature bottle with carination above the base show correspondences to approximately contemporary north Indian types (fig. 6, 3-4 and 8), although there is a distinct variation in features.

C. PAHĀRPUR

The ruins of the Buddhist temple and monastery of Somapura, founded by Dharmapāla (circa A.D. 770-815), the second Pāla king, lie at Pahārpur in Rājshāhī District of East Bengal and were excavated during 1926-34.³

¹ T. N. Ramachandran, 'Tāmalīpti (Tamluk)', *Artibus Asiae*, XIV (1951), pp. 226 ff.

² Goswami, *op. cit.* For earlier exploration, see *An. Rep. Arch. Surv. Ind.*, 1921-22, pp. 83 f.

³ K. N. Dikshit, *Excavations at Paharpur, Bengal*, Mem. Arch. Surv. Ind., no. 55 (1938). For earlier reports, see M. Martin, *Eastern India*, II (1838), p. 169; E. V. Westmacott, *Jour. Asiatic Soc. Bengal*, XLIV (1875), p. 188; *Arch. Surv. Ind. Rep.*, XV (1882) pp. 117 ff.

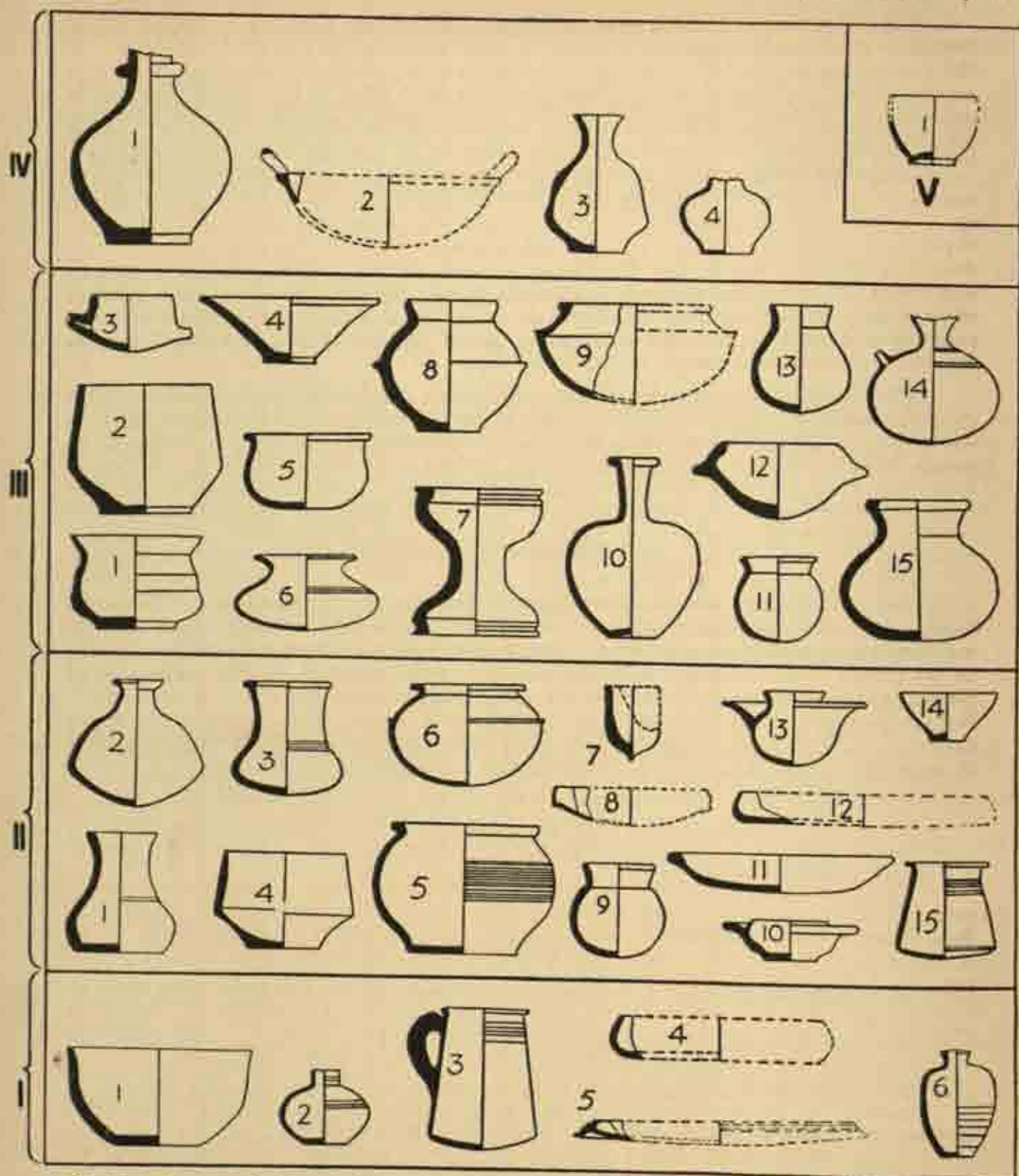


FIG. 12. Sequence of pottery at Bāngarh (after Goswami): I, late Maurya; II, Śuṅga; III, Kushan and Gupta; IV, Pāla; V, medieval. Not to scale

Cruciform on plan, with angular projections on the arms, the massive brick temple here originally stood 100 ft. high in three receding terraces (pl. LXXIII). A thick compound-wall, with a series of one hundred and seventyseven cells on its inside makes up the monastery and encloses the central temple. The entire complex is pre-planned, without subsequent accretions to the main structure, unlike many other ancient religious edifices.

At regular intervals the basement of the structure was provided with niches to take in sixtythree stone images of Brahmanical deities, possibly re-used from an older temple (pl. LXXIV). The upper terraces were faced with one or two rows of terracotta plaques, depicting an exceptionally rich range of themes, consisting of Brahmanical and Buddhist deities, anecdotes from the two Hindu epics, mythology and folklore, birds, animals and foliage (pl. LXXV). Numbering three thousand, these plaques are striking evidence of the contemporary craftsman's skill and genius in plastic art. Architecturally, with its receding terraces the temple formed the prototype of similar class of temples developed in Burma, Java and Cambodia.

The temple belongs to the eighth century, but a copper plate discovered in a clearance here is dated in A.D. 479.¹ Being principally a monastic establishment, the site was poor in small objects of everyday use. The pottery used by the monks dated mostly from the tenth to the twelfth century.

D. MAHĀSTHĀNGARH

The extensive city-site of Mahāsthāngarh in East Bengal is situated on the Karatoyā river, 7-8 miles north of the district town of Bogrā. An inscription of the third century B.C. found here states that a provincial governor was posted in Puṇḍranagara, the name by which Mahāsthāngarh was anciently known.² Evidence of continued occupation at the site was supplied by the accidental discovery of Śuṅga terracottas and Kushan coins.³ But the partial excavation of two of its several mounds carried out in 1928-29⁴ revealed structures only from the Gupta period to the eleventh century, the Pāla levels being rich in moulded terracotta plaques of the Pahārpur type.

E. MAINĀMATĪ

Terracotta plaques in Pahārpur tradition were used over a wide area. Ample evidence of it comes from Maināmatī and Lālmāi Hills, 6 miles east of Comilla in East Bengal, where a number of these plaques were discovered in a removal of earth.⁵ A regular excavation at the site is likely to reveal a temple-establishment of the Pahārpur type.

¹*Epigraphia Indica*, XX (1929-30), pp. 59 ff.

²*Ibid.*, XXI (1931-32), pp. 83 ff.

³*Jour. Asiatic Soc. Bengal*, XXVIII N.S. (1932), pp. 127 ff.

⁴*An. Rep. Arch. Surv. Ind.*, 1928-29, pp. 88 ff.; 1935-36, pp. 67 ff.; 1936-37, pp. 51 ff. For earlier exploration by Cunningham, see *Arch. Surv. Ind. Rep.*, XV, pp. 104 ff.

⁵T. N. Ramachandran, 'Recent archaeological discoveries along the Mainamati and Lalmai Ranges, Tippera District, East Bengal', *B. C. Lato Volume*, pt. ii (Calcutta, 1946), pp. 213 ff.

8. WESTERN AND CENTRAL INDIA

The prehistory of this region has attracted attention for a considerable time past. At the same time, the traditional belief in the sanctity of some towns on the Narmadā and other rivers has invested them with a supposed rather than proved antiquity. But it is only recently that a picture of sequential cultures has started to emerge here.

The Narmadā has sustained habitation from older times than its northern compeer in popularity, the Gangā. The Stone Age and the protohistoric microlithic cultures (above, pp. 57, 60, 64 and 68) were followed here by a historic sequence which falls apparently into three broad phases as at present known (fig. 13).

The first of these phases, dated to *circa* 500-100 B.C., is distinguished by the predominance of a black-and-red ware, an industry which, in fact, comes on the scene earlier with upper microlithic deposits (*circa* 700 B.C.). In upper levels it overlaps with the N.B.P. Ware. But, unlike the southern Black-and-red Ware, it has rarely been found associated with iron but mainly with copper, which makes it considerably early, certainly earlier than its southern analogue of 'megalithic' context (above, p. 110). Dolmens and cists are unknown here, except stone circles near Nagpur¹ and post-cremation burials in urns or pits as at Bahal and Amreli. At the latter place the burials are surrounded by stone circles. At Bahal they have also yielded the black-and-red ware. This ware is sometimes painted with simple dots and lines in white, a peculiarity noticed in Saurāshtra and as far north as Āhār near Udaipur in Rājputānā. The N.B.P. Ware has not yet been reported from Saurāshtra, but that may possibly be due to inadequate exploration, in view of its otherwise known wide distribution.

A beautiful red polished pottery, imitating the Samian ware and possibly even imported from Rome in some quantity, is the hall-mark of the second phase from *circa* 100 B.C. to A.D. 200 but continues late till *circa* A.D. 500. It may be recalled that Roman coins of various dates between the first and fourth centuries have been reported from several sites in India, including the central region,² although they have not yet been obtained in this part in a systematic excavation. Other relics of Roman origin include clay *bullae*, widely distributed,³ sealings, some bronze vessels and a statuette of Poseidon found at Brahmapurī near Kolhāpur (below, p. 163). The third phase, *circa* A.D. 200-500, is also characterized by the Red Polished Ware, but its quality deteriorates with succeeding times. Āndhra and Kshatrapa coins, and occasionally those of the Kushans and Guptas, are met with in these levels.

A. UJJAYINI AND VIDIŚĀ

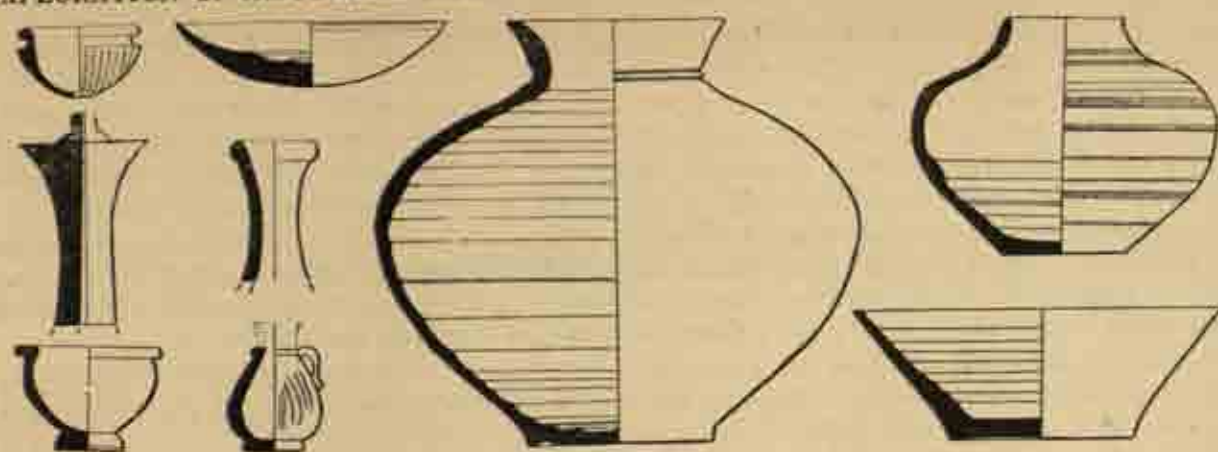
Among ancient sites in this region known to earliest literary tradition are Ujjayinī (modern Ujjain) and Vidiśā (modern Besnagar), the latter famous for the Garuḍa pillar set up by Heliodoros, ambassador of Antialcidas, king of Taxila, to the court of king Bhāgabhadra.⁴ During his father's rule Aśoka is said to have married the daughter of a banker at Vidiśā on his way to take up the office of viceroy at Avanti. These sites

¹J. H. Rivett-Carnac, 'Prehistoric remains in central India', *Jour. Asiatic Soc. Bengal*, XLVIII (1879), pt. I, pp. 1 ff.

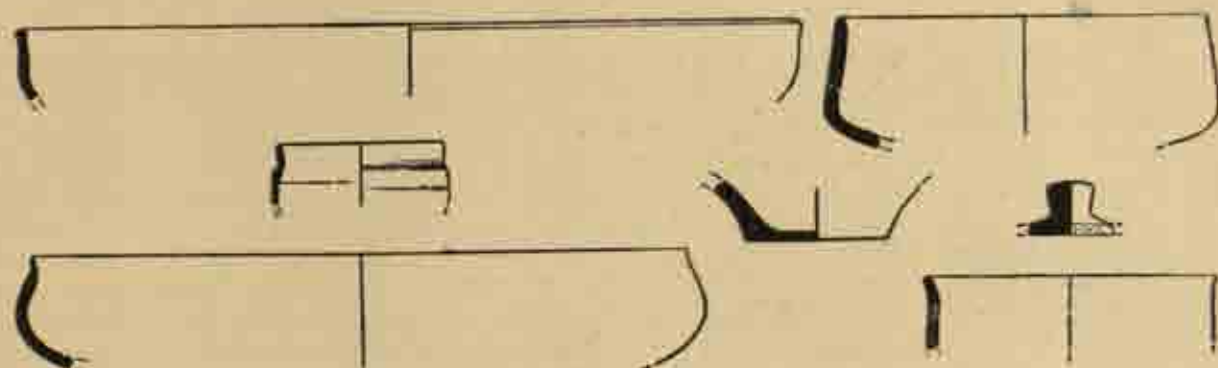
²*Ancient India*, no. 2, pp. 116 ff.

³*Ibid.*, no. 5, pp. 102 ff.

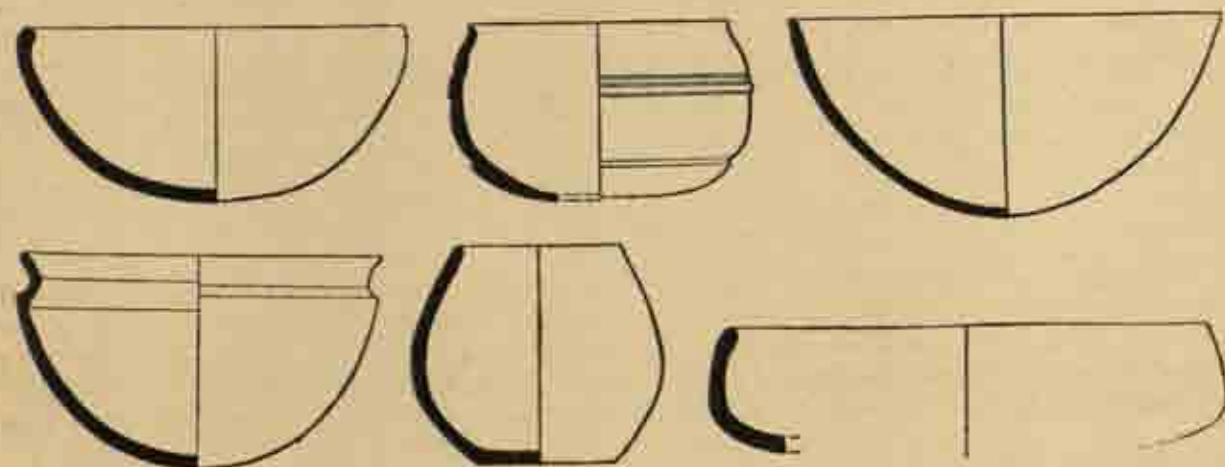
⁴*An. Rep. Arch. Surv. Ind.*, 1908-09, pp. 126 ff.; 1913-14, pp. 186 ff.; 1914-15, pp. 66 ff.



3. RED POLISHED WARE (100 B.C.-500 A.D.)



2. NORTHERN BLACK POLISHED WARE (500 B.C.-100 B.C.)



1. BLACK AND RED WARE (700 B.C.-100 B.C.)

FIG. 13. Sequence of pottery in central and western India. $\frac{1}{2}$

have not been excavated, except for some superficial work at Ujjain.¹ But the cultural sequence may not be very different here from that of excavated sites. The microliths and the N.B.P. Ware have been reported from both the sites and the occupation apparently continued at least till late Gupta times. At Ujjain, where the ancient town stretches along the Śiprā, remnants of a wooden structure, recalling the palisade at Pāṭaliputra (above, p. 147), have been exposed. Ringed soak-wells are another feature of the town. Among the published photographs of pottery found at Ujjain are some shapes which recall certain north Indian types, particularly those corresponding to fig. 5, 8, 16, 18, and fig. 6, 3 and 10. The punch-marked and cast Ujjain coins, dated between the third century B.C. and first century A.D., found in large numbers in excavation and on surface, confirm the antiquity of the site. Four miles north-east of Ujjain, the mound of Kumhār Tekri conceals a burial-cum-cremation ground of an uncertain date, but certainly prior to the third century B.C., judging from the occurrence of uninscribed cast coins in the upper levels of the mound.

B. SĀNCHĪ

At Vaiśya Tekri near Ujjain, a mound is suspected to conceal the remains of a *stūpa*. But it is Sānchī and Bharhut which, with their famous *stūpas*, represent the early artistic traditions of the country. At Sānchī the N.B.P. Ware has also been noticed. The earliest monuments here were erected by Aśoka, two of which have been identified, viz., a brick-built *stūpa* and an inscribed pillar with a lion-capital. The original *stūpa* was enlarged and provided with a stone casing in the Śuṅga period (pl. LXXVI), when two other *stūpas* were also constructed. Subsequently, during the Āndhra period, the *stūpa* was provided with its famous carved doorways on all sides (pl. LXXVII). A similar gateway was also added to an adjacent *stūpa*. Additions and enlargements continued to be made to the monuments till the eleventh century.²

C. BHARHUT

The famous *stūpa* at Bharhut, of plastered brickwork, has disappeared long ago, but the surviving portions of its carved stone railing are now kept mostly in the Indian Museum, Calcutta, and are held up as typical specimens of Śuṅga sculptural art.³

D. PAWĀYĀ

Mention may also be made here of two early sites in the former Gwalior State, although they have not been excavated to any extent. Of these, Pawāyā is identified with Padmāvati, the ancient capital of the Nāgas. Superficial excavation here has brought to light sculptures going back to the first and second centuries A.D., important among

¹ *Annual Administration Report of the Archaeological Department, Gwalior State, 1938-39 (1940)*, pp. 13 ff.; B. C. Law, *Ujjayini in Ancient India* (Gwalior, 1944).

² John Marshall and others, *The Monuments of Sānchī*, 3 vols. (Delhi, 1940); John Marshall, *A Guide to Sānchī*, 3rd ed. (Delhi, 1936).

³ A. Cunningham, *The Stupa of Bharhut* (London, 1879); Benimadhab Barua, *Bharhut*, 3 vols. (Calcutta, 1934-37).

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which is a life-size standing image of Yaksha Manibhadra inscribed with his name in characters of the first century A.D.¹ A temple of Gupta date is also worthy of mention.

E. MANDASOR

Sondhi, near Mandasor, is famous for the inscribed pillars of Yaśodharman.² Mandasor itself was anciently known as Daśapura and was a prosperous town in the fifth-sixth centuries A.D. Trial-excavations here revealed some structures and sculptures of late Gupta times.³

F. MAHESWAR

Maheśwar, in Nīmār District of Madhya Bharat on the Narmadā, is identified with Māhishmatī, a city founded by king Muchukunda according to Purāṇic tradition and one time capital of Avanti according to Buddhist texts.⁴ It was excavated recently by a Joint Universities Expedition organized by the Deccan College Post-graduate and Research Institute, Poona, assisted in one form or another by the Universities of Poona, Baroda and Bombay and the Madhya Bharat Department of Archaeology. Over the proto-neolithic and microlithic cultures (above, pp. 68, 72 and 98) were found here remains of three early historical periods from *circa* 400 B.C. to A.D. 500 and then a medieval Muslim-Maratha occupation. The earliest of the historical periods, *circa* 400-100 B.C., is distinguished by the black-and-red pottery and N.B.P. Ware, silver and copper punch-marked coins and early local coinage. Occasionally microliths are also present, but they may be survivals. At Navdā Toli, opposite Maheśwar on the south bank of the Narmadā, a *stūpa* of the second period, *circa* 100 B.C.-A.D. 200, came to light. This phase is dominated by the Red Polished Ware resembling the Samian ware. In the third phase, *circa* A.D. 200-500, unrepresented at Navdā Toli, the Red Polished Ware, presumably imitated, continued in association with early cast coins. The last occupation, of Muslim-Maratha period, is characterized among other objects, by glazed medieval pottery.⁵

G. NĀSIK

The Deccan College Post-graduate and Research Institute had earlier explored Nāsik along with some other sites in Mahārāshtra. Above distinct deposits of palaeoliths succeeded by microliths (above, pp. 60, 67 and 71), the historical remains begin here with the N.B.P. Ware, dated to *circa* 300 B.C., and continue into the early centuries A.D.⁶

¹ *An. Rep. Arch. Surv. Ind.*, 1915-16, pp. 101 ff.; 1924-25, p. 165.

² Fleet, *op. cit.*, pp. 42 ff.

³ *An. Rep. Arch. Surv. Ind.*, 1922-23, pp. 185 f.; 1925-26, p. 187.

⁴ B. C. Law, *Ujjayini in Ancient India* (1944), p. 3.

⁵ H. D. Sankalia, 'Excavations in the Narmada valley', *Jour. Maharaja Sayajirao University of Baroda*, II (1953), pp. 99 ff.; H. D. Sankalia and others, 'The archaeological sequence of central India', *South-western Journal of Anthropology*, 9 (1953), pp. 343 ff.

⁶ H. D. Sankalia, 'Ancient and prehistoric Mahārāshtra', *Jour. Bombay Branch Roy. Asiatic Soc.*, XXVII (1951), pp. 99 ff. The palaeoliths were found at Gangāwādi, 10 miles from Nāsik, in a pre-microlithic river-deposit.

H. BAHAL

A hoard of six hundred and eightyfive silver punch-marked coins discovered in 1943 and the presence of the N.B.P. Ware had attracted attention to Bahal in East Khandesh District on the Girnā river. The site was accordingly excavated recently. Over a microlithic deposit (above, p. 68), succeeded by the use of copper and iron, with which the black-and-red ware is found associated, the historical remains of the site commence with the N.B.P. Ware. The occupation continues to the early Sātavāhana period, characterized by the use of Red Polished Ware, and is succeeded by late Sātavāhana deposits and finally by medieval remains. On the opposite bank of the river, some post-cremation burials in urns and pits were also discovered. These burials were apparently post-microlithic but preceded the use of copper and iron. They yielded chalcedony blades, carnelian beads and the typical black-and-red pottery.¹

I. AMRELI

While the burials at Bahal are obviously early, at Amreli in Kāthiāwāḍ peninsula of Bombay State, certain pit-circles for post-cremation burials were dated to *circa* second century A.D. The entire occupation here dates from the first century B.C. to the fourth century A.D. (pl. LXXVIII). The Red Polished Ware resembling the Samian ware persists through this whole span and is interlocked with dated Kshatrapa coins and terracotta figurines and sealings. Six miles north-east of Amreli, at Moṭā Machiālā, this Red Polished Ware overlies the painted pottery familiar to us from Rangpur and now taken as representing a post-Harappā culture.²

J. TRIPURI

Tripurī, the capital of the Kalachuris in early medieval times, was recently excavated by the Saugor University. Here again, over a microlithic culture (above, p. 70), the historical remains begin with the N.B.P. Ware (fig. 2, 4, 9, 12, 14, 20 and 21) and punch-marked coins, above which lie the local Tripurī issues of about the third century B.C. The site was occupied by the Buddhists about the second century A.D., the corresponding levels yielding coins of late Sātavāhanas and the Indo-Roman Red Polished Ware. The latest occupation is dated to the fourth century A.D., the scattered remains of the Kalachuris having remained uncleared so far.³

K. BARODA

The University of Baroda has recently excavated at two adjacent sites in and near Baroda on the Viśvāmītrī river. These two sites, the Medical College area and the neighbourhood of the village of Akoṭā, revealed at the bottom a microlithic culture which had been swept away by floods. The next occupation started about the first century A.D. and continued almost uninterrupted till *circa* A.D. 1600. The early historical period,

¹ Information from Shri M. N. Deshpande.

² Information from Shri S. R. Rao.

³ Information from Dr. M. G. Dikshit.

from *circa* A.D. 100 to 600, is characterized by the Red Polished Ware, associated with which was found a Kshatrapa coin. A Roman bronze handle had earlier been found here, and in the excavations were discovered two clay seals in Graeco-Roman style. Later on Akotā was known by the name of Añkottaka according to inscriptional evidence.¹ A large number of Jaina bronzes attest to its importance in medieval days.

L. BRAHMAPURI

On the western outskirts of the city of Kolhāpur the mound of Brahmapuri was excavated by the Deccan College Post-graduate and Research Institute, Poona, in 1945-46,² after a bronze statuette of Poseidon, the Roman god of sea, had accidentally come to light there. The beginnings of this city may go back to *circa* 200 B.C. or earlier, as indicated by the presence of the N.B.P. Ware. It is, however, from the second century A.D. that there is firm evidence of flourishing brick-built houses and such articles of common use, as coins, beads, bangles and iron implements. Roman contact is further confirmed by a bronze vessel and clay *bullae* made in imitation of Roman prototypes. With possible gaps of short durations, the occupation continued here till the fifteenth-sixteenth century.

In the lower Sātavāhana deposits of the early centuries A.D., the salmon- or red-surfaced Roman ware, imported or imitated, and a black-slipped ware are the characteristic ceramic industries, with sporadic occurrence of the N.B.P. sherds. There are also some pots entirely made of kaolin or bearing slip of that material. The late pottery, of *circa* A.D. 400-900, is sophisticated in form and has excellent fabric and finish. There is also in these levels a substantial percentage of decorated pottery, both impressed and incised. In the eleventh-twelfth century levels of the Śilāhāra rule, a deterioration sets in in the general quality of the pottery, which becomes particularly marked in the pottery of the Bahmanī period (*circa* fifteenth-sixteenth century). The clay now used is porous, and the pots are burnt red or grey to black. The slips used also vary between grey to jet black.

9. THE DECCAN AND SOUTHERN PENINSULA

The trail that the Roman trade left in southern India has played the same rôle in determining the chronology of indigenous products as the Greek contact in the north-west. Certain Roman wares, imported or closely imitated, were first recognized at Arikamedu, near Pondicherry; subsequently, one of these, the so-called rouletted ware, has been traced over a wider region, so that the local industries associated with it have automatically acquired a reasonable chronology (fig. 14). Roman communication with the south is further confirmed by numerous finds of Roman coins.³

The microlithic and neolithic cultures in the south (above, p. 71) were succeeded by the iron-using megalithic culture. A distinct Black-and-red Ware, manufactured by inverted firing, is characteristic of this region, and at Brahmagiri has been dated to *circa* 200 B.C. to A.D. 50 (above, pp. 107), although it might have originated considerably earlier. The next phase in the cultural evolution of the south is marked by a yellow- or white-painted russet-coloured pottery, commonly called the 'Āndhra' ware. The Sātavāhana

¹ B. Subbarao, *Baroda through the Ages* (Baroda, 1953).

² H. D. Sankalia and M. G. Dikshit, *Excavations at Brahmapuri (Kolhapur), 1945-46* (Poona, 1952).

³ *Ancient India*, no. 2, pp. 116 ff.

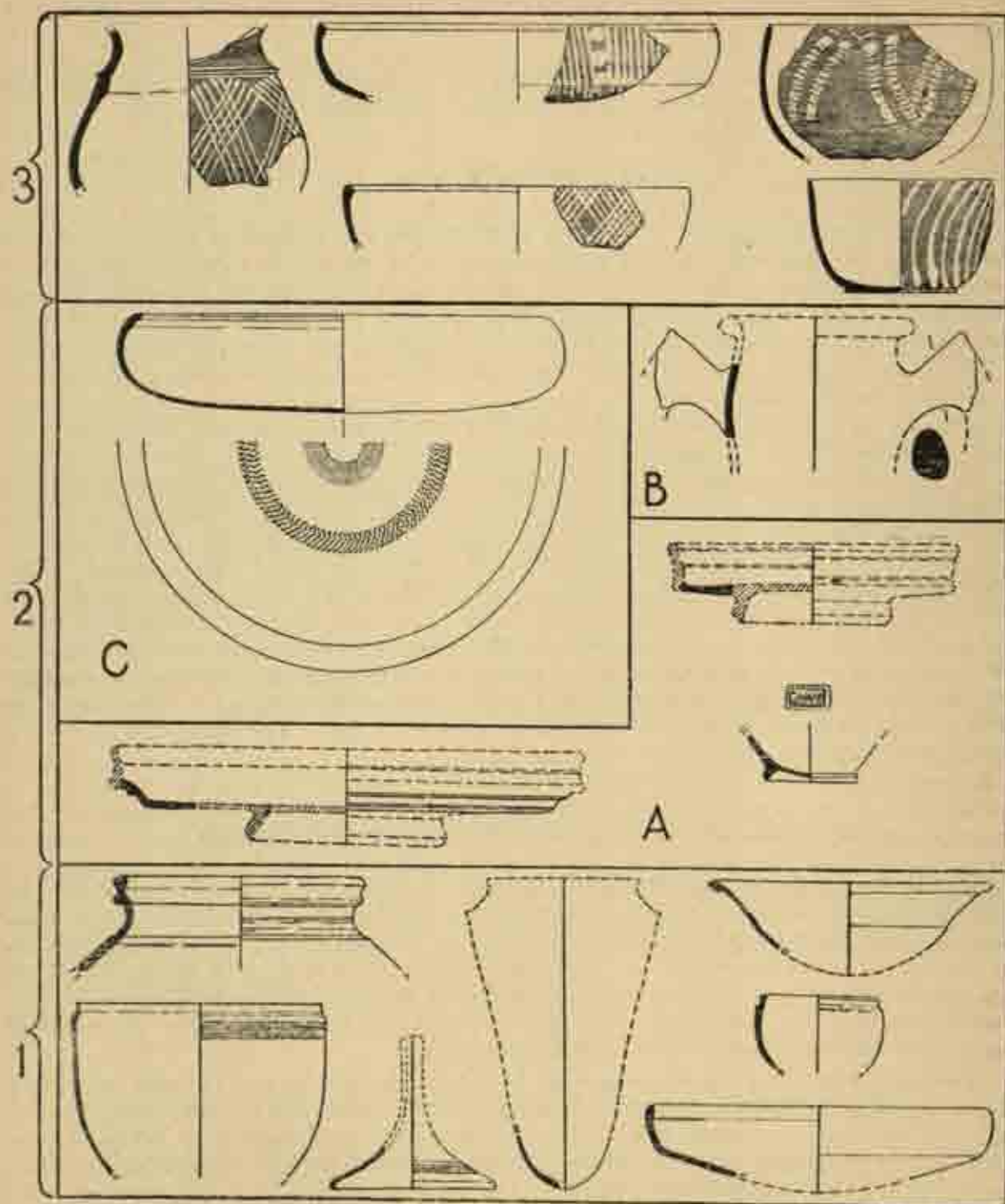


FIG. 14. Sequence of pottery in south India: 1, Black-and-red Ware (circa 300 B.C. (?) - A.D. 50; 2 A, Arrentine ware (A.D. 20-50); 2 B, amphora (first-second centuries A.D.); 2 C, rouletted ware (first-second centuries A.D.); 3, 'Andhra' ware, (circa A.D. 50-300). Not to scale

age, from *circa* A.D. 50 to 300, is its duration, and associated with it occur Roman coins, local Āndhra issues and the rouletted ware.

Our knowledge of the commoner industries of the post-Sātavāhana periods is still very vague and imperfect, almost all that we know of these times being confined to the evolutionary phases of sculptural and architectural traditions as observed in *stūpas* and temples and other religious establishments. The Chinese celadon is known, however, to make its appearance in the south about the ninth century and to continue till late medieval times. Of the late medieval towns, mention may perhaps be made of Hampi, the capital of the Vijayanagara kings from the fourteenth to the sixteenth century.¹ Fortifications, palaces, and temples make up this interesting town, a unique feature of which was an arrangement to supply water to royal apartments through stone-built channels. Limited excavation carried out in a part of the fortified area revealed ruins of palaces of the Vijayanagara period.

A. ARIKAMEDU

Finds of certain beads and gems of Roman make at Arikamedu, 2 miles south of Pondicherry, had attracted the attention of the French archaeologist G. Jouveau-Dubreuil in 1937. Subsequently the French authorities carried out a superficial excavation there. In 1945, however, the site was explored by the Archaeological Survey of India on a scale large enough to give a reasonable picture of the nature of the ancient settlement, including its contact with the Roman world² (pl. LXXIX).

A large warehouse built about A.D. 50 came to light in one of the two sectors excavated; in the other were noticed four levels of successive structures, which included a courtyard with two small tanks, both believed to have been used in the preparation of muslin exported outside India (pl. LXXX).

It is, however, the broken bits of pottery which had a significant story to reveal: for Roman ware of two categories occurred here almost through the entire span of occupation, from the close of the first century B.C. to A.D. 200. These were the two-handled amphorae, intended to contain wine or oil, and the smooth-surfaced wide dish with concentric bands of rouletted pattern. The pattern and technique of the latter were definitely importations, though not necessarily so the specimens found. A third ware was more limited in duration, between A.D. 20 to 50. This is a red-glazed ware, sometimes stamped with the name of the potter and commonly called the 'Arretine' ware from the Latin name of Arezzo (Arretium), which was famed contemporaneously for producing a high quality ware of this class. Among other imported objects, including earlier finds, were Graeco-Roman gems, some intagliated, a red ware Roman lamp and Roman glass bowls, occasionally 'pillared' in mould.

The earliest local ware at Arikamedu is predominantly grey with some proportion of red ware, but the latter shows a progressive increase till it outnumbers the former. Finally a process of devolution sets in, and the red ware gets cruder and cruder. In the pre-Arretine layers some of the pots have basket-impressions, graffito-decorations or incised designs of the simplest kind. The Black-and-red Ware usually associated with megaliths is also present, but in very limited quantities.

¹ A. H. Longhurst, *Hampi Ruins* (Delhi, 1933).

² R. E. M. Wheeler, A. Ghosh and Krishna Deva, 'Arikamedu: an Indo-Roman trading-station on the east coast of India', *Ancient India*, no. 2, pp. 17 ff.

Arikamedu was obviously an Indo-Roman coastal trading-station, probably identical with Podouke mentioned in the *Periplus of the Erythraean Sea* (circa A.D. 60-100). It ceased to be active after circa A.D. 200 and was thereafter subjected to spoliation in medieval times, as indicated by stray finds of Choḷa coins and fragments of Chinese celadon ware.

B. BRAHMAGIRI

At Brahmagiri, in Chitaldrug District of Mysore State, identified with the town of Isila mentioned in Aśoka's rock-edict at the adjacent village of Śiddāpur and excavated by the Archaeological Survey in 1947,¹ the results obtained at Arikamedu were utilized for working out the date of the 'megalithic' Black-and-red Ware underlying the rouletted ware. There was a sequence of three cultures here. The lower two, the Stone Age and megalithic cultures have been dealt with above (pp. 67, 77 and 101). The uppermost culture, dating from the middle of the first century A.D., overlapped with the megalithic in the lower levels but was all the same distinct, characterized by the use of a sophisticated pottery, often 'decorated with varieties of simple rectilinear or slightly curvilinear patterns in a paste of kaolin or lime under a wash of russet-coloured ochre'.² This has acquired the name of 'Āndhra' ware owing to its occurrence in the Āndhra country during the rule of the Sātavāhana kings.

C. CHANDRAVALLI

A limited excavation was also carried out at Chandravalli near Chitaldrug simultaneously with the work at Brahmagiri.³ The lower levels here brought out the typical Black-and-red Ware, and the upper levels showed the same yellow-painted Āndhra pottery as at Brahmagiri, interlocked with specimens of the rouletted ware and denarii of Augustus (23 B.C.-A.D. 14) and Tiberius (A.D. 14-37). Coins of the Sātavāhanas were comparatively few at Brahmagiri, but they were plentiful at Chandravalli.

The sequence observed at Brahmagiri and Chandravalli is valid for a wider area northwards including Maski⁴ and Pakhlihal⁵ in Raichūr District and Konḍāpur in Medak District⁶ in Hyderabad State. The published reports of these excavations are somewhat confusing, recounting mainly the wealth of antiquities recovered. It seems, however, that at all these places vestiges of neolithic and megalithic cultures are succeeded by relics of the Āndhra period, including coins, terracottas and beads. At Konḍāpur, among numerous coins was also found a coin of Augustus (23 B.C.-A.D. 14).

¹R. E. M. Wheeler, 'Brahmagiri and Chandravalli 1947: megalithic and other cultures in Mysore State', *Ancient India*, no. 4, pp. 180 ff.

²*Ibid.*, pp. 236 f.

³For earlier excavations here by the Mysore Archaeological Department see 'Excavation at Chandravalli (Mysore State)', *Supplement to Annual Report of the Mysore Archaeological Department for the year 1929* (Bangalore, 1931).

⁴*An. Rep. Arch. Deptt. H. E. H. Nizam's Dominions*, 1935-36 (1938), pp. 22 ff.

⁵Information from Dr. P. Sreenivasachar.

⁶G. Yazdani, 'Excavations at Kondapur, an Andhra town' (circa 200 B.C. to 200 A.D.), *Annals of the Bhandarkar Oriental Research Institute*, XXII (1941), pp. 171 ff.; M. G. Dikshit, *Some Beads from Kondapur* (Hyderabad, 1952); P. Sreenivasachar, *Kondapur* (Hyderabad, 1953).

D. SENGAMEDU

Sengamedu on the Manimuktā-nadī near Vriddhāchalam in South Arcot District, excavated recently by the Department, is one of the few known habitations of the authors of megaliths (pl. LXXXI). It was significant to find here also the specimens of rouletted ware in the upper levels of the Black-and-red 'megalithic' Ware, thus confirming the general pattern of successive cultures in the south.¹

E. AMARĀVATĪ

In the Āndhra country, a strong tradition of Buddhist art and culture grew up between the third century B.C. and third century A.D., manifesting itself in the construction of several *stūpas*, *chaityas* and *vihāras*, particularly along the Krishnā. The *stūpas*, constructed of brick and plastered, stood on a raised circular podium with a rectangular projection on each cardinal point. They were mostly built on a wheel-pattern, with a central hub sending 'spoke'-walls and a circular casing taking the place of the rim. The space between the walls was filled with earth, and the outer face of the casing was decorated with carved stone panels representing scenes from Buddha's life.

The *stūpa* at Amarāvati² was razed to the ground by a landlord in the closing years of the eighteenth century, but its plan was laid bare in the early years of the present century. Some of its best sculptures have survived in different museums in India and abroad. The site is of interest, however, for other, and more potential, reasons as well. For below the Buddhist settlement here lie megalithic stone circles, and on the surface have been noticed the rouletted ware and a single stray N.B.P. sherd,³ both important landmarks in Indian archaeology. About 1½ miles west of the *stūpa* lie the remains of a township, probably identical with Dhanakāṭaka of early inscriptions. Once this site is excavated, it will throw valuable light on southern contacts with the north, evidenced by the recovery of the N.B.P. Ware.

✓ F. NĀGĀRJUNAKONḌĀ

Stone circles also exist at Nāgārjunakonḍā, 65 miles west of Amarāvati. But the place is renowned for the extensive remains of Buddhist buildings, which were excavated during 1927-31 and 1938-40.⁴ The excavations exposed a main *stūpa*, some smaller *stūpas*, *chaityas*, *vihāras* and *maṇḍapas* (pl. LXXXII). The *chaityas* here are apsidal, and the rectangular *vihāras* or monasteries include within their precincts an apsidal temple and a *stūpa*. The remains of a long riverside wharf, presumably covered with a wooden roof, were also found.

The numerous inscriptions found at Nāgārjunakonḍā indicate that the settlement was built in the second-third centuries under the patronage of Ikshvāku rulers, particularly

¹ Information from Shri N. R. Banerjee.

² J. Burgess, *The Buddhist Stupas of Amaravati and Jaggayyapeta* (London, 1887); *An. Rep. Arch. Surv. Ind.*, 1905-1906, pp. 115 ff.; 1908-09, pp. 88 ff.

³ Information from Shri A. Ghosh.

⁴ A. H. Longhurst, *The Buddhist Antiquities of Nāgārjunakonḍā*, Madras Presidency, Mem. Arch. Surv. Ind., no. 54 (1938); T. N. Ramachandran, *Nāgārjunakonḍā 1938*, Mem. Arch. Surv. Ind., no. 71 (1953). References to the *An. Reps. Arch. Surv. Ind.* have been omitted.

their queens. The city-site adjacent to the religious settlement was called Vijayapuri. A palace-site at Nāgārjunakondā has been identified but not excavated.

Like the Amarāvati *stūpa*, the site has yielded over five hundred beautifully executed stone bas-reliefs. The coins include a gold coin of the Roman emperor Hadrian (A.D. 117-138) and several Āndhra lead coins.

Among other Buddhist settlements in the Āndhra country, not necessarily of the same size or importance as Amarāvati or Nāgārjunakondā are Jaggayyapeta,¹ Śālihūṇḍam,² Guḍivāḍa, Ghaṇṭaśālā and Bhaṭṭiprolu.³

10. THE SOUTH-EAST REGION

The area between the Āndhra country in south and Bengal in east is exceptionally rich in temples and sculptures of medieval times. But only one site here has so far been excavated. It would be hazardous to generalize for the entire region from this single excavated site, viz. Śiśupālgarh, near Bhuvaneśwar in Orissa, but it is not fortuitous that we should find here, owing to its particular geographical position, an infiltration of characteristic ceramics both from the north and south, viz., the N.B.P. Ware and rouletted sherds.

A. ŚIŚUPĀLGARH

The ancient town here, possibly identical with Tosali of Aśoka's edicts at Dhauh, 2 miles south of it, and with Kalinganagara of Khāravela's Hāthigumphā inscription at Khandagiri, 6 miles north of it, is enclosed within a rectangular rampart with two gates on each side. The excavation here⁴ was limited to three areas: part of the inhabited town in the centre, a gateway on the west and a section across the massive defence wall.

The houses in the town were built with bricks or cut laterite slabs, and the streets seem to have been laid on a chess-board pattern (pl. LXXXIII). The western gateway, built of massive slabs of laterite, was flanked by L-shaped arms projecting outwards which could be ascended by regular flights of steps (pl. LXXXIV). Two doorways, outer and inner, gave access to the town through the flanks. A third narrow passage, passing through the northern flank close to the inner doorway, presumably restricted the entry when the main doorways were closed.

The site was first occupied about 300 B.C., but the original rampart, of heaped earth, was not built till a hundred years later, when, perhaps quite by coincidence, a black-and-red ware made its first appearance here. As we find another ceramic here from the south, it is reasonable to regard this ware also as an extension from the same region rather than from western and central India, where also an analogous pottery exists. In the second phase a 4-6 ft. thick layer of laterite was laid on the earlier earthwork. Two brick walls, 26 ft. apart, with debris and mud-filling in between, marked the third phase, while, finally, when the earlier revetment had partially collapsed, a new revetment was built with stepped exterior.

¹J. Burgess, *op. cit.*

²*An. Rep. Arch. Surv. Ind.*, 1919-20 (1922), p. 30; T. N. Ramachandran, 'An inscribed pot and other Buddhist remains in Śālihūṇḍam', *Ep. Ind.*, XXVIII (1949-50), pp. 133 ff.

³A. Rea, *South Indian Buddhist Antiquities* (Madras, 1894).

⁴B. B. Lal, *op. cit.* (1949).

EXPLORATION OF HISTORICAL SITES

The total occupation of Śiśupālgarh has been divided into three periods. The formative period of the settlement, *circa* 300-200 B.C., shows singularly plain pottery of a dull-grey to terracotta-red surface. No structural remains of this period came to light. The next period, with impressive structures of laterite slabs, may be divided into two phases, the earlier of which, *circa* 200 B.C.-A.D. 100, shows a sophistication of the local pottery combined with the introduction of decorations and the evolution of a bright red polished ware. At the bottom of this period occurs the Black-and-red Ware, while the late levels occasionally yield fragments of the rouletted ware, which was first identified at Arikamedu (above, p. 65). A few sherds of the N.B.P. Ware, probably nothing more than survivals, occur in late levels of this phase. In the latter phase of this period, *circa* A.D. 100-200, the bright red ware deteriorated into a plain red ware with an ordinary wash, and the decorative patterns became crude. Glass bangles, clay *bullae* imitating Roman coins, a silver punch-marked coin and a copper coin of Huvishka were also found in the deposits of this period. In the last period, *circa* A.D. 200-350, the devolution of the bright red ware to a thin, ineffective red or yellowish-red pottery was complete. A gold coin, copied from the coinage of the Kushan king Vāsudeva, and some Puri-Kushan coins came from this period. A large number of terracotta ear-ornaments obtained here show their beginnings in the second period, but it is in the last period that they became extremely abundant and characteristic of the site.